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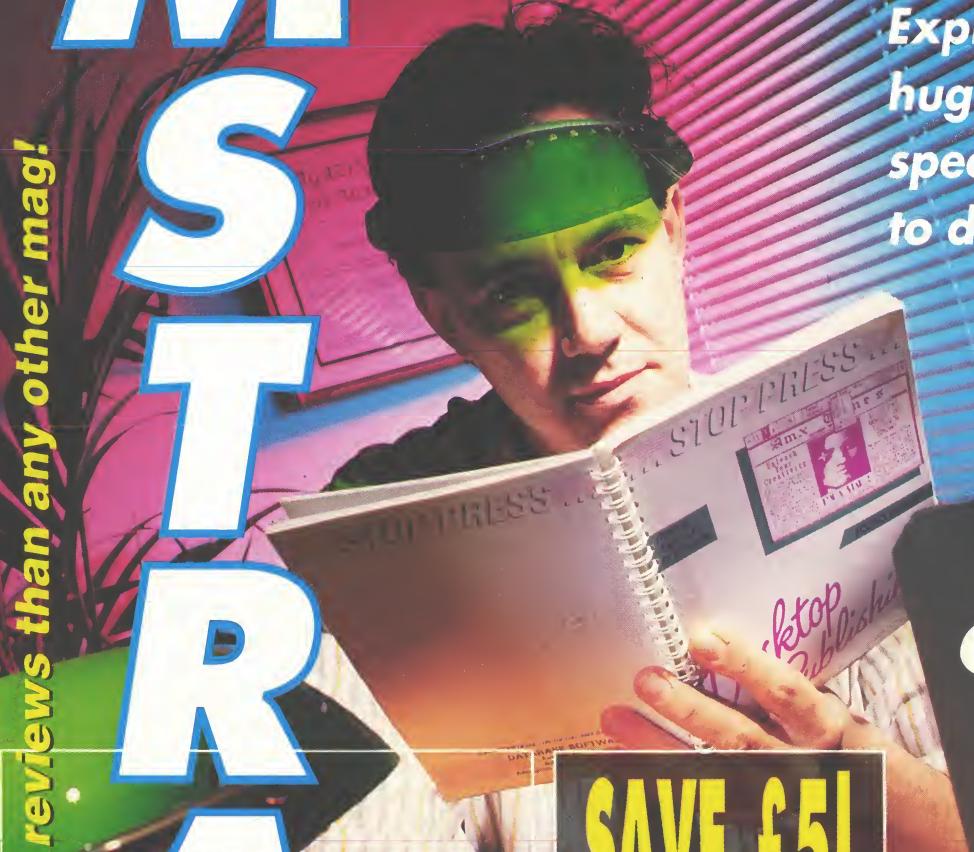


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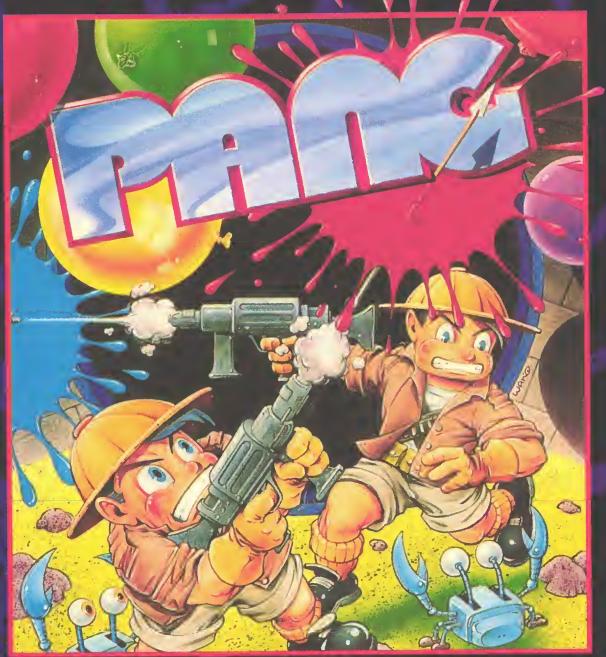


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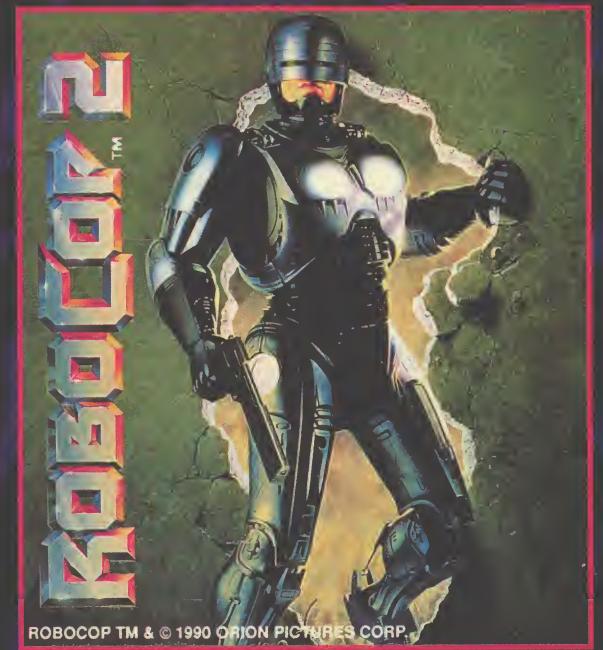


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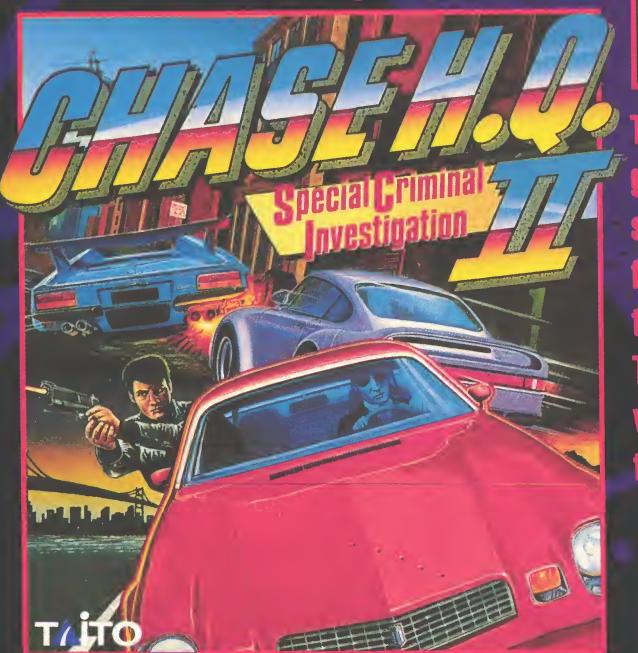
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HE'S BACK



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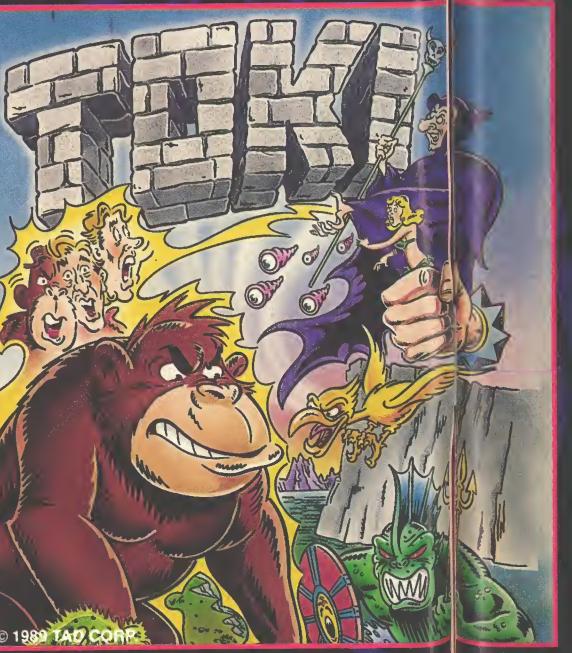
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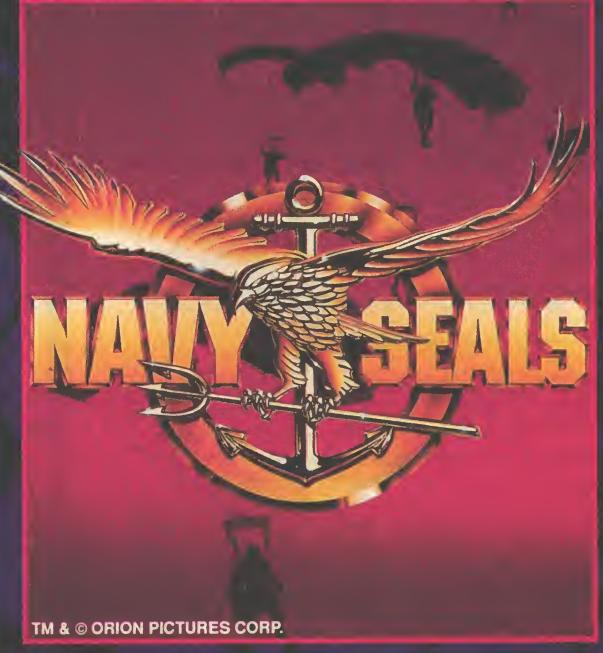


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IT'S TOUGH



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'F-16 Combat Pilot pulls out all the stops'
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'F-16 Combat Pilot wins hands down'
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Flying fast and low, I turn my F-16 towards my target. Time to switch on the ground radar and arm the laser-guided Mavericks. I fire six missiles in quick succession, Lantirn automatically locking on to each tank. With flak bursting around me I dive for cover and head for home. Approaching base, I contact the tower and request a talkdown for my night landing.

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AND THERE'S MORE...

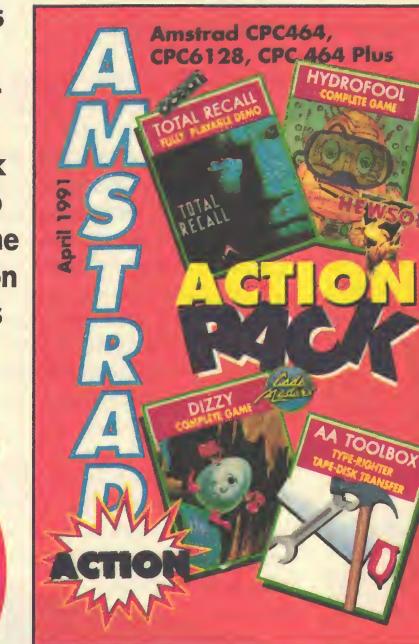
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LINE UP

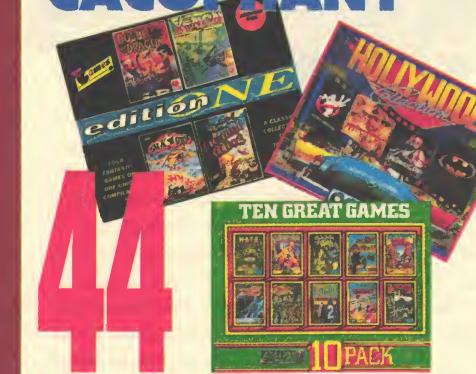
ACTION PACK

Starting this month you get a cover-tape every issue. Check out pages 6 and 7 for the run-down on this month's cracker!



6

COMPILATION CACOPHANY



44

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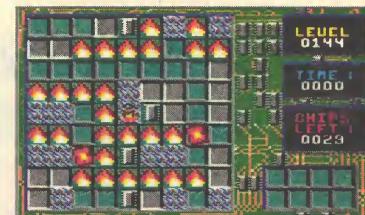
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CHIP'S CHALLENGE



Manic maze mayhem - US Gold's puzzler is a goodie!

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● WIN, WIN, WIN!
39
A £400 Sony CD hi-fi system is up for grabs plus loads of T-shirts and posters...!
COMPO!

DESKTOP PUBLISHING



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Design your own notices, leaflets and even magazines...! Part 1 of our special AA feature

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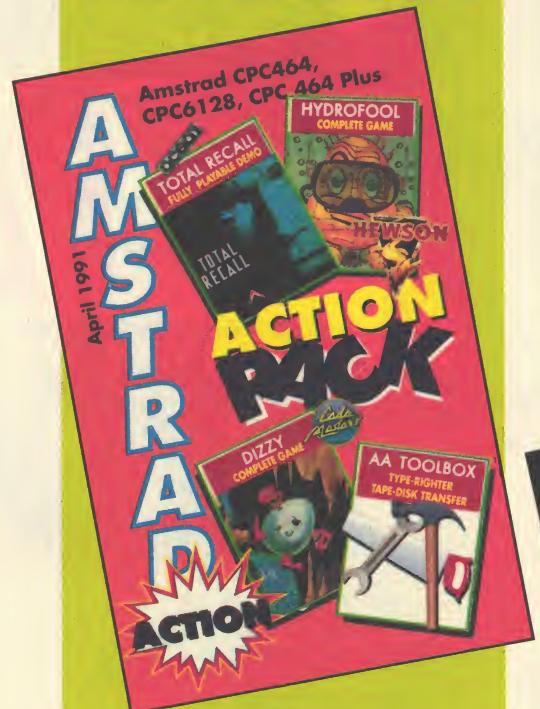
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ACTIONPACK

Welcome to the first of Amstrad Action's new, regular covertapes. And we're starting off with a bang. There's a fully-playable level from Ocean's new licence *Total Recall*, two

HOW TO LOAD THE COVERTAPE



Loading the programs couldn't be simpler! The first program on the A-side is *Total Recall*, and if you simply type RUN" (followed by RETURN), that will load first. If you want to play *Hydrofool*, on the other hand, just wind into the tape a couple of minutes and type RUN", as before. (The computer will then ignore any remaining code for *Total Recall* and only start loading when it reaches *Hydrofool*.)

Alternatively, you can type RUN"TOTAL or RUN"HYDRO, and the computer will find the programs automatically as you play the tape from the beginning. On the B-side, the filenames you want are DIZZY, TWRITER and DISK.TFR.

If you have a disk drive connected to your machine you'll first have to type !TAPE to switch the machine to tape loading rather than disk loading. (The ! is obtained by pressing SHIFT and @.) The computer will then load the next program on the tape.

COMPLETE games and a new feature, the AA Toolbox, which will contain all manner of useful routines and utilities. And the best news of all? All programs transfer to disk...

TOTAL RECALL HYDROFOOL

Exclusive! A playable level from Ocean's interpretation of the blockbuster movie *Total Recall*! The film stars Arnie Schwarzenegger as Quaid, the victim of a memory transplant that has given him a new identity and erased his past.

He discovers this, and is determined to unravel the web of lies that hides his past. For this he needs to travel to Mars, where the key to the mystery will be discovered...

The game of the film is split into a number of levels. And especially for you we have Level One as a taster! Don't forget, when you get to the end of this playable level, there are four more waiting. So if you want to see them, you can buy the complete game from our mail order pages at a generous discount!

You have to guide



Ha! Arnie's too hard to be frightened by a laser-splitting robot. (The fool!!)



Oh no! That wolf fish looks vicious. (Lucky it's on the other side of those spikes then.)

World are various sea-dwelling creatures. They don't take kindly to the interruption to their existence, even though Sweevo's only trying to save them), and you'd be well advised to avoid them.

Also dotted about this underwater underworld are various bits and bobs to help you on your way, including cans of oil for topping up your supply, and pick-ups that can be used as weapons.



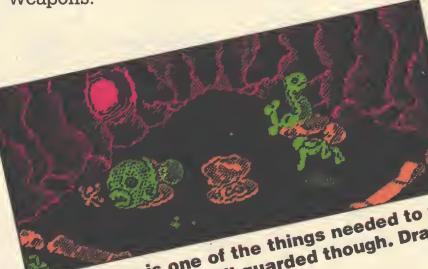
Cripes! That lazer beam coming on all of a sudden as given Arnie a start!

Total Recall controls

Q/up	Jump
A/down	Crouch
O/left	Left
P/right	Right
Space/fire	Punch/fire

(Tapping down and fire simultaneously will swap between firearm and fist.)

The keyboard is redefinable, so if you're an alien from the planet Hor'hurg-hurg you'll still be able to find a comfortable playing combination.



That bone is one of the things needed to pull a plug. It's pretty well guarded though. Drat!

Hydrofool controls

The keyboard configuration is quite weird at first, but you do get used to it after a while. (You can use any of the keys listed - whichever suits you best!)

WERT/Left	Up left
YUIO/Up	Up right
SDFG/Down	Down left
HJKL/Right	Down right
Space/Fire	Pick up/Drop/Fire

Giz a lift. Dizzy's scared of spiders so you'd better tread carefully when fetching that key

DIZZY

Dizzy was exploring the haunted forest, looking for berries, flowers, and a piece of wood with which to make a club, when he discovered a mystifying stone slab. Brushing the dirt aside, he was able to read (after a great deal of head-scratching) the faint inscriptions:

The Avawiffowee Potion
Fill a bottle with cooked Leprechauns wig, clouds silver lining, vampire dux feather and some troll brew - cook the potion and throw it at Zaks to dissolve his reign."



Whee! Those springy mushrooms are just the job to reach otherwise inaccessible ledges

So that's what you have to do - kill the evil Zaks and you can live happily ever after. You have three lives, but this number can be increased by finding eggs. The bouncy mushrooms can be used to jump higher. Watch out for booby traps!

To defeat the Wizard, you must light the fire under the cauldron and drop the ingredients into it. Then drop the empty flask into it and it will be filled.

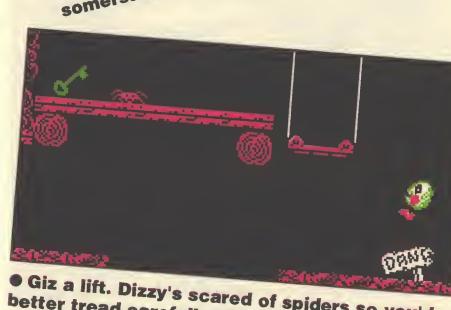
Smash the flask next to Zaks, and you have won!

Dizzy controls

Z/left	Left
X/right	Right
SPACE/up	Jump
Enter/fire	Pick-up/drop/use



It's no wonder they call him Dizzy. All that somersaulting about is enough to make you ill!



Giz a lift. Dizzy's scared of spiders so you'd better tread carefully when fetching that key

Tape Trouble?

We hope that your covertape will load first time. However, having worked with computers for as long as we have, we know that things don't always go like clockwork. If you have problems loading the tape, try the following:

- Try loading at several different volume levels if you're using an external tape recorder. Computers can be very fussy about the volume they will load at.
- Clean the tape heads. This can be done with any commercially available cleaning kit. Alternatively, use a cotton bud soaked in alcohol. Gently rub the surface of the heads and pinch roller to remove that layer of accumulated grime.
- Adjust the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually

accessible through a small hole. Rotate it a fraction at a time with a jeweller's screw driver. When the crispest sound is heard, the alignment is spot on.

- Sometimes the tape spools can jam or stick at a critical moment. Check the spools in your cassette rotate freely, if necessary giving the casing a slight tap against a table edge just to make sure.

If, after trying the all of the above, you still can't get the tape to load then you can return it for a replacement. Send the tape, along with an SAE to:

AA67 Covertape Returns, Ablex Audio Video Ltd, Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.

single character on the line...

Well now your wildest dreams have come true! This wonderful program is yours, and you don't even have to type it in! (Because it comes on the covertape, silly.)

It works by generating the code each time the Return key is pressed. It's a machine code program, and hides itself away once it's been run. When you've loaded and run Type-righter, it's just as well to type NEW to clear the BASIC area. (Don't worry: once Type-righter has been initialised, it doesn't need the BASIC program.)

Now just type in a listing from Amstrad Action. Every time you ENTER a line, the checksum will be printed immediately following the end of that line. (We print them at the start of each line for clarity.) Make sure they match. If the don't, you've made a mistake!

If you prefer, you can check the listing after it's been typed in. Just type LIST, and the codes will appear at the end of each line. If you have a printer connected to your computer you can print out the listing complete with checksums by typing: LIST #8.

May you never be troubled by SYNTAX ERRORS again!

AA TOOLBOX

What's them funny codes in Type-Ins and Cheat Mode for, then? You know, the strange four-letter codes in the {squiggly brackets} at the start of each line? That's the question on people's lips the length and breadth of the country.

Actually, these codes are rather useful. They're not for typing in, though. Instead, they're checksums, designed to help you ensure that you've typed in programs correctly.

When we print listings, we run them through a special program that produces the codes. The codes are worked out from a combination of all the characters in a program line, and are unique for each line. However, the same sequence of characters will always produce the same checksum, so if a line is mis-typed, the checksum displayed on your computer will differ from the version printed in the magazine.

So, wouldn't it be just wonderful if you had the same program that we use? Then, when you had an error in your program, all you'd have to do is check that the codes are identical. Much easier than painstakingly going through every

But I've got a disk drive...

Disk drive users will no doubt be horrified at the prospect of loading the programs from cassette ever time they want to use them. Well, fear not. At the end of the tape is a special little program that'll transfer all the programs from tape onto disk.

It's the last program on side B of the cassette, called DISC.TFR. Just run it as you would a normal program, wind the tape to the beginning, and it'll transfer all the programs automatically (when you reach the end of side one, you'll have to turn the cassette over).

Make sure that you insert an empty disk into the drive before running the program - nearly all the space on one side of a disk is taken up.

If you're using an external cassette recorder, then connect the REM jack to the

REM socket if there is one. The computer will stop and start the tape several times as it transfers the files across. If you don't have a REM socket on your cassette recorder then you'll have to be careful to pause the tape in the right places. Pause it when the red disk drive light comes on; this indicates disk access.

Once everything has been transferred, the disk will be full of files. The programs can be run by typing the following:

Total Recall	RUN"TOTAL
Hydrofool	RUN"HYDRO
Dizzy	RUN"DIZZY
Type-righter	RUN"TWITTER
Disk transfer	RUN"DISK.TFR

AmScene

AMSTRAD'S STEADY PROGRESS

Despite current gloom and uncertainty over the new Amstrad cartridge machines, the company itself is doing rather better than this time last year.

To be exact, Amstrad's pre-tax profits for the last six months of 1990 were some £40 million - £10 million up on the equivalent figure for 1989.

However, Amstrad is cautious about predictions for its next set of figures, quoting the general recession in the UK and poor December 1990/January 1991 sales.

Meanwhile reports from the trade about the performance of the new GX4000 and Plus continue to be gloomy. While buyers report

continued non-availability of cartridge games in the shops, retailers are discounting the machines heavily.

The problem is less with the new hardware itself than with the market as a whole. Commodore's 64 GS console is faring badly too, by all accounts, although the longer-established Sega and Nintendo consoles have had a good Christmas.

Amstrad may well

have to take the longer view with its updated CPC (Plus) range. Instead of the early sales the company was no doubt hoping for, it may instead take several months - maybe up until Christmas this year - before the machines build the sort of user base that will make them a commercial success.

Meanwhile, software publishers initially interested in the cartridge format will now be watching the new machines' sales performance very carefully before committing themselves to the large investments required for cartridge duplication runs.

Serious business

While Amstrad's recent forays into the leisure market are looking shaky - at least for the time being - the company has turned its attention to the lucrative serious and corporate market.

Amstrad Action's sister magazine New



• Amstrad's new machines struggled in the shops over Christmas. Rumoured enhancements to the PCW machine, however (inset), demonstrate Amstrad's continuing commitment to its 8-bit machines.

Computer Express has uncovered Amstrad's plans for the forthcoming Hanover Messe Computer Fair. Amstrad is thought to be planning new versions of its PC-compatible portable machines and top-end models. Perhaps most interesting for the CPC owner, however, are Amstrad's plans for the ageing PCW series of machines.

The PCW is technically very similar to the CPC, sharing the same central processor. Like the CPC, the PCW is equipped with a 3-inch drive. Speculation is growing, however, that Amstrad plans to upgrade the machine to include a 3.5-inch drive instead. This format allows greater storage on cheaper disks.

It seems unlikely that Amstrad will ever upgrade the CPC/Plus to the new format, but the move does at least show Amstrad's continuing commitment to its long-running 8-bit machines.

Strong Foundation

Foundation Software has released an updated version of its *Step Time MIDI Sequencer* - the only step-time sequencer you can get for the CPC.

The new version - the *Multi-Track Step Time MIDI Sequencer* - boasts a whole range of features. These include up to 99 patterns and 256 bar song memory, variable tempo, beats/bar and note volume in each pattern, full 8-octave note range and much, much more. An additional feature is the MIDI song linker. This lets you play a number of songs in succession.

Look out for a full review in *Amstrad Action* shortly. In the meantime, Foundation Software's address is: 27 Crofters End, Sawbridgeworth, Herts CM23 0DF, tel: 0279 725788 (evenings/weekends).



• Scull PD has a new address. And its new newsletter is designed with its latest product - a public domain DTP program!

SAVING THE ENVIRONMENT

Printer manufacturer Star is staging a major international competition - "The World and our Future" - aimed at raising environmental awareness in schools and colleges.

Star is looking for teams of three students (who must be in the 16-18 age group) and a sponsoring teacher. The teams must tackle projects relating to energy, global warming, the 'throwaway culture', world resource use and the 'ageing of society'. Submissions will be judged according to their "originality, relevance to subject, soundness of research and impact of presentation".

Schools entering will be classified according to six geographical areas, and the winners from each area will meet with winning teams from other European countries and go on a cultural exchange visit to Japan in the summer.

So far, over 600 schools in the UK have responded, but with a closing date for entries of May 10th, there's still time to join in.

To request a Competition Pack, write to: The World and our Future, Byron House, Wallingford Road, Uxbridge, Middx UB8 2RW.



Printer maker Star is running an environmentally sound competition for students.

WHAT'S NEW?

Have you got any product news you think we should know about? Basically if you've got a new widget or piece of software, we don't know until you tell us! Or maybe there's some scoop news story you think we ought to know about...? Either way, write to: AmScene, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

The Computer Shopper Show Treasure Trail...

The Computer Shopper Show will take place May 10th-12th at London's Alexandra Palace. The organisers are expecting a mammoth turn-out, and are celebrating with a special treasure trail-style competition.

• First prize

Public domain library and user group WACCI is putting up a year's subscription to its magazine and all the software in both its CP/M and "Homegrown" libraries. No fewer than three lucky winners will receive this massive prize

• Runners up prize

Ten runners up will each receive a pair of free tickets to the Computer Shopper Show

The competition

This one will stretch the old grey cells a little bit. Basically, you're going to have to demonstrate more than a little geographical knowledge if you're going to come up with the right answer.

You must answer the following questions (there are eight in all) and then take the first letter of each answer and come up with the name of your final destination (an anagram of the eight letters). Ready? OK, here we go...

1. In the wilds of Scotland, Caithness is where the first clue is found. Name the UK Atomic Energy Authority's prototype fast breeder reactor which opened in 1975.

2. A long journey South to the North West corner of Northamptonshire. This village was the scene of a decisive battle in the English Civil War where a Cromwellian victory was scored on June 14, 1645.

3. East to the Fenlands of Cambridge now where this cathedral towers above the dikes of the flat lands.

4. East again to the coast. In the 15th century, Sir

John Fastolf built Caister Castle from his proceeds of war. Which county is it in?

5. Now to Wiltshire and a religious site of the early Bronze Age which gives England its most outstanding stone circle.

6. A trip North West to the Welsh borders. The greatest king to rule Mercia in the eighth century was responsible for this impressive earthwork. His name was Offa but what term describes his structure?

7. North to the Isle of Man. Where do we find the largest water wheel ever built in Britain?

8. And now East to Yorkshire where many ancient buildings are found. What are Fountains, Rievaulx and Bolton?

Remember now, you must take the first letter from each answer and form the name of your final destination in this treasure trail.

Write down your answers to each question, and the final destination on a postcard, and send it to:

Computer Shopper Show
Treasure Trail, Amstrad Action, 29 Monmouth Street, Bath, Avon BA1 2BW

• The closing date for this competition is April 30th, so get cracking!



• Enter the Computer Shopper Show Treasure Trail, and you could win a whole host of goodies...



• Citizen's 124D printer is now £30 cheaper, bringing 24-pin quality even further within the reach of the home user.

extreme

"Extreme is one mean game!"

86% Crash

"Extreme-ly good!"

85% C + VG



"A remarkable demonstration of what the Speccy can do."
80% Your Sinclair.



URGENT MESSAGE....life sustaining power cut and self-destruct sequence started!
Soon your planet will be destroyed.
Time is running out - HURRY!



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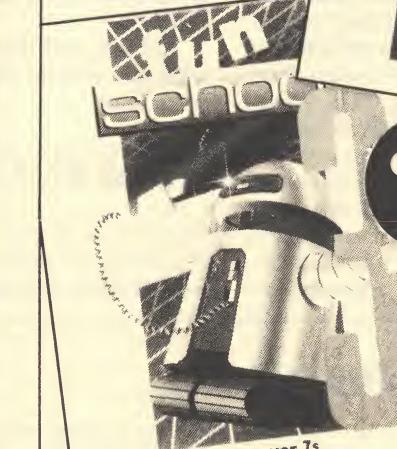
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Reaction

Reaction is *Amstrad Action*'s four-page readers' letters section, supervised by the ed, Rod Lawton. It gives you the chance to air your views on anything even remotely connected to computing.

Is software piracy acceptable? Are computer games sexist? Should Amstrad phase out all the tape-driven machines? Write to: **Reaction, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW.**

The best letter each month wins a £25 voucher which can be exchanged for goods in our mail order section...

Is Alex patronising?

I welcome the removal of the Buyers Guide, but I think that the pages vacated could be put to better use. I am sure that beginners to computing do not enjoy being patronised the way they are in the new feature, *Ask Alex*. When I began computing about five years ago, I picked up all the information in these pages from long-standing pages like *Forum* and *Amscene*, all brilliant features in your wonderful mag (creep, creep). I'm sure that beginners could learn perfectly well like I did. The current waste of space could be replaced by something useful, like a beginner's course in assembly language, as I expect that many readers would like to start programming in it. By the way, people like me who have learned about computing by ourselves are not 'eggheads' or 'propellor-heads' as Alex calls us.

James Grant
Basingstoke

AA: I think you're confusing 'patronising' with 'basic'. Alex has a definite talent for explaining sometimes complex subjects in a chatty and informative style, but she never 'talks down' to her readers - that's why she writes for us. Also, it's all very well learning things the slow way, as you describe, but (a) you've got to be fanatically interested and (b) patient. We don't believe in making things hard for our readers.

I'm sure Alex didn't mean you personally when she used the words 'egghead' and 'propellor-head'.

French Test - the facts

First may I thank you for publishing the review of our program *French Test* in your February issue. We were very pleased to get such a good

Of course the covertape works!

Many thanks for the free tape on the front of issue 64. How do you do it? And for only £1.95...

I'll tell you how you do it! Only one side of the tape works, that's how! How could you do this to an *Amstrad Action* reader?

When I try to load side B, all I get is Read Error B. No matter what I do, rewind and try again, still the same... clean the tape heads, still the same... give up, still the same.

So now it's your chance to tell me how to get it to load.

Stephen J.Frydrych
Alloa

AA: Cobblers! - of course both sides work...

Mind you, we have had a few people complaining that *Space Froggy* won't load, so maybe there is something in it.

The thing is, every single copy of the tape we've tried (and that's plenty!) on our office 464 has loaded perfectly, so all we can suggest is (a) that you give the cassette a little tap on the side of a table in case the tapes spools are sticking, or (b) adjust the tape deck volume level (6128 owners only). Failing that, send us the tape back and we'll send you another one, but to be honest, we can't imagine what the problem might be, bar a slightly suspect volume level - and that's only guessing.

review, but wondered whether you could find room to correct what seems to have been a misunderstanding about the use of "upper and lower case letters".

First, whenever a capital letter is used in the French, this is always matched by one in the English and vice-versa, except in cases when it is different in the English language from the French; for example, in the days of the week, months of the year and languages, etc, it is precisely because the French say "vendredi" for "Friday" that it is necessary to be accurate about the use of upper and lower case letters - an educational point that really cannot be ignored: that it "serves to annoy" ensures that the student gets it right next time!

GMF Programs

Too small to read?

Man and boy (but mostly OAP), I have been entering type-in programs from various magazines for about six years. In all that time, I have never come up against a program like 'Musical

but just because people like to play games it doesn't make them intellectually inferior! I love playing computer games myself, and if you ever show your face round here I'll give you a damned good punch on the nose...

Sorry I cut your letter short, by the way, but I was getting a bit fed up. By the way, the can in the picture was empty.



AA: 'Crassheads' they may be to you, Peter,

Up the budgets!

In reply to the letter from John Fairlie, who complained about the existence of cassettes in AA64 - spare a thought for the not-so-computer-gifted readers who use their machines mainly for games.

Firstly, budget computer games would die a sad death on the abolishing of cassettes. For many young computer fans like myself, who own cassette machines, and whose only means of buying software is weekly pocket money (I get £4 myself), this would mean an end, basically, to buying games. And the action of recoding from tape to disk does not console in the slightest.

And talking of consoles; they may provide stunning graphics, with the whole machine devoted to games, but at £20-30 a throw? I think not, when you compare that to £2.99 for a game much the same. I know the console graphics are heavenly, but when you think about it, the Amstrad graphics aren't altogether hell-bound either. Anyway, it depends on the game.

Secondly, surely the variety of game on offer on disk is limited? With cassettes, my



● Don't phase out the cassette software! This plea comes from A.Sugar of Glasgow (no, it's true!) pleading the case for budgets.

eyes gaze lovingly at row upon row of neat, rectangular budgets. And the odd disk game dotted here and there.

A.Sugar (sorry)
Glasgow

AA: Quite right too! The market for budget software is huge, and commercially very important. Amstrad has rightly recognised this with the retaining of the tape-driven 464 machine, and although it would make life easier in some ways if everyone did use disks, it would be tough on people who could only afford cassettes.

Chords and Scales' on page 75 of AA64.

You would need either a magnifying glass or an extremely good pair of eyes to enter the program exactly as printed, and what is the purpose of all the spaces at the end of the line? I would add that you have to enter the spaces in order to get the checksums to tally.

I thought that some of my fellow readers might benefit from the absurdly simple little utility I have written to overcome the problem. See below:

```
10 REM Programming Aid by A.Entwistle
20 SYMBOL AFTER 32
30 SYMBOL 32,0,0,0,24,24,0,0,0
40 MODE 1:INK 0,0:INK 1,26:GOSUB 90
50 LOCATE 2,2:INPUT "Width":WID
```

Allan Entwistle
Cardiff

```
60 IF WID>78 THEN 50 ELSE IF WID>38 THEN MODE
2:GOSUB 90
70 WINDOW 2,wid,2,24
80 CLS:NEW
90 DRAW 0,398,1:DRAW 638,398:DRAW 638,0:DRAW
0,0:RETURN
```

You must use a proportional font to print the Type-ins listings, which doesn't help any. I would suggest that it might be better if you used Condensed or anyway a Standard font. You could then count the number of characters from the left-hand side and set the width correspondingly. Anything which didn't fit would then stick out like a sore thumb.

Stephen Braithwaite
11 Ottawa Road
Bottesford
Scunthorpe DN17 2TG
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We want to keep **Reaction** as the place where you, the readers, can get your views and opinions printed, as well as providing specialist sections in the magazine for all those other enquiries. Keep those letters coming in...

AA: Oh dear, and I thought you were about to compliment us about the program. Your criticisms have been noted. Ollie no longer works on AA, by the way, and Paul Tudor says it was nothing to do with him... and by the way, we don't use a proportional font for listings. What we use is a bit-mapped version of the very same font displayed on the Amstrad screen (in hi-res mode).

I hope your listing prints OK, only I found it a bit tricky to read...

Which art package?

My son, aged nine, has had a CPC 464 since age three, and by now is very adept at playing games.

I would like to buy him a graphics package in which he has expressed an interest, but I am unsure of the most suitable as we have read a number of ads but have had no opportunity to see or try any of them.

Ron McMillan
London

AA: Advanced Art Studio (£24.95) is about the best. Call the suppliers, EEC, on 0753 888866 or hunt through the mail order ads for a copy.



● OCP Art Studio (shown) or the Advanced Art Studio (later version) is about the best CPC art package.

Braille program in the public domain

I have written a BASIC (6128 only) program intended as an aid to learning Braille for the sighted and partially-sighted. Should any fellow readers need such a program or public domain library like it, they can have a copy for the price of disk & postage.

Inspiration came from a similar Spectrum program and a need to learn Braille. Programs of this nature usually only appear on the BBC computers. Should anyone wish to convert it to this medium, I know of a teacher keen to get hold of a copy.

I own 45 copies of AA - a wealth of information - but how are we supposed to

remember which page & issue to find a given subject? Surely you could publish a comprehensive annual index?

Stephen Braithwaite
11 Ottawa Road
Bottesford
Scunthorpe DN17 2TG
Tel: 0724 856897

AA: What a worthy project! As far as an index is concerned, however, the work of referencing (and cross-referencing!) every item described in AA would be a Herculean task. I'm afraid there's just no way we could do it.

Slot solution

Please, please, please, please, please tell me no-one has come up with this idea before. On the back of my 6128, the edge connectors are nearly all worn out, due to the plugging in and unplugging of printer leads, expansions, disk drive leads etc. If you could build a small 'cover' that you could slip over the edge connector then it would not be worn away, and you would not have to have it repaired!

Paul S. Hinchcliff
Ipswich

AA: Well, it's a sort of original idea, but only because we don't think anyone would buy it! Those edge connectors aren't a lot of cop, but our office machines are still OK after years of hard use. Secondly, many peripherals also incorporate straight-through connectors - why not leave one of these plugged in all the time?

Games too easy?

I wish to complain about the marks you have given in some of your reviews. The two that spring to mind are *Thunderbirds* (AA47) and *Lotus Esprit Turbo Challenge* (AA65). *Thunderbirds* received a Mastergame and the reviewer talked about its "long-term appeal", which made the game excellent as it would last a long time. When I read this review I thought the game sounded good, so I bought it, on disk, for £15. When I got home I loaded the game and within five hours I had completed it. The same applies for *Lotus Esprit Turbo Challenge*. It was highly recommended by you so I immediately purchased it (again, it cost £15). Your reviewer said, "the variety of circuits means there's enough variety to last any racing fan for yonks". Yonks? Do you call three hours yonks? I admit it is an excellent game, but I expected it to last at least a week. So in all I spent £30 for only eight hours of gaming.

Apart from this complaint, AA is the 'only' magazine for CPC users, and is utterly brilliant.

Paul Crisp
Reading



Is *Lotus Esprit Turbo Challenge* too easy? Or is Paul Crisp one mean, mean son-of-a-gamesplayer...?

AA: I can't speak for *Thunderbirds*, because I've never played it - but you reckon you 'finished' *Lotus Challenge* in three hours? Is that on the hardest of the three levels? And using manual gears? And do you think there's no more fun to be had from it, despite the

simultaneous two-player mode...?

You must be some mean gamesplayer, Paul. Either than, or you've got a pretty unusual notion of when a game's 'finished'. Sorry you feel disappointed, though.

Bristol is the pits

Three things: First, Ask Alex. A beginners section is a great idea, but please, please, please change the little picture of (I presume) Alex. It looks like something out of *Zzap* or, even worse, a Spectrum magazine.

Second, why aren't there any shops with a decent selection of Amstrad games in Bristol. That really gets on my wick.

Third (and last, thank God), I was looking through an Amiga magazine the other day, laughing at the prices, when I noticed 'Rod Lawton' at the bottom of a review. What have you been doing, Rod? An explanation, please.

Tom Melluish
Bristol

AA: Alex herself has asked us - rather forcefully - to change that picture of her. It was drawn from a photo, and a not very flattering one, at that.

Secondly, Hull is reckoned to be the jewel of the North (about head height, then) and Birmingham is the heart of the Midlands. That, then, makes Bristol the posterior of the South. No wonder you can't get Amstrad games there.

As for me having my name at the bottom of an Amiga review, that's because I was writing for our sister mag *Amiga Format*. (Now and again they call upon my journalistic skills, you know... ahem.)

Tracking down a family tree?

In reply to the cry for help from D.Ramsbottom of Hull, in AA63: Some two years ago, I had the same intention of putting together a family tree. At that time I found a genealogical database known as GENNY available from D.C.S., 38 South Parade, Bramhall, Stockport.

I don't know if the company is still in existence but, if D.R. has any trouble or would like any other info on the product, he can contact me on 0494 29191.

D.L. Harvey
High Wycombe

Get serious!

After reading some letters about AA being a serious magazine and reading your reply, you say that you are not just for games but serious as well - but you have proved yourself wrong. On each of this year's cassettes, what do we get? A tape full of demos and games. You cannot deny that you are slowly moving towards a games mag. In past years every cassette had some programs on it other than games. Last year, we got a word processor, among other

things. Christmas 1987 we got a disk editor (the best I have yet seen). This proves a move towards a games mag - even the other Amstrad magazine is more serious than you.

Where have those days gone when spreadsheets, word processors, databases, DTP and art packages were being written for the Amstrad? How long has it been since the last one was released, a couple of years maybe? The days of serious software being released on the Amstrad are gone.

The future of the Amstrad as an all-round computer is slowly going - within a year will the Amstrad just be another game machine like the Commodore and Speccy? I hope not - the Amstrad is the last remaining 8-bit all-round computer, and has to carry on if 8-bits are not to be remembered solely as games machines.

Maybe Arnor will produce a cartridge version of Protext will spelling checker etc, an all-in-one with pull-down menus etc like on the 16-bit versions. This might encourage other companies to do the same.

Lastly, when is Emma Broadley returning to AA?

Stewart Hector
Barnstaple

AA: You've answered your own question, Stewart! "Where have those days gone when spreadsheets, word processors, databases etc were being written for the Amstrad? To be honest, I'm getting slightly miffed with people blaming us for the decline in serious software. WE DON'T PUBLISH SOFTWARE, so it's outside our direct control. And to be frank, there has been comparatively little good serious software in the past couple of years, and to feature less-than-brilliant stuff just to make the magazine 'look' more serious would be to lead our readers up the garden path. Amstrad Action reflects the Amstrad industry, it doesn't control it! Your quarrel is really with the software publishers, but even they are not entirely to blame, as Amstrad has categorically stated that the Amstrad machines are now, as far as that company is concerned, strictly games-only, and that's how they're going to be advertised and marketed from now on. Sad, but true.

As for Emma Broadley, I'm afraid she made more enemies than she did friends, so I doubt she'll ever be coming back.

Getting ratty over Shredder

I'm afraid that I have to point out to you that you've made a mistake (gasp! - slap Rod's wrists at once!). Page 59, AA65, paragraph 3. It says, "Level Three sees you searching for a machine that

turns Shredder back from a rat..." Now unfortunately, you forgot to mention the competition involving that mistake, so I thought that you'd better give me a prize of a week in Marbella, a night on the town with Rod and Adam, a James Leach Doll and £10. Since all but one of the prizes are a bit past their sell-by dates at Tesco's, I will take the £10. Thank you very much. Also, could you use games cartridges (i.e. Robocop 2 etc) on a ROM board?

David Wallis
London

AA: We made no mistake. Sure enough, in the film *Shredder* has always been a rat, but in the game you get to do something about it. So ya boo sucks to you!

No, you can't plug cartridge games into a ROM board.

Dizzy runaround

I'm a great Dizzy fan and have completed all of the Dizzy series except *Magic Land Dizzy*. So when I saw the new Dizzy game released, I leapt to the shops only to find it would not be released on its own till about January. I waited and waited and waited. When January came about I rushed down to W.H.Smiths for *Magic Land Dizzy*. I got there and a man said we will order it for you. It should be here by about next week. Next week the man said - you can buy it on the compilation or wait another week. Since I had all the other Dizzy games including the two spin-offs *Kwick Snax* and *Fast Food Dizzy*, I decided to wait. Next week came, the man said still on order. Another two weeks, and the man said I have done some enquiring about this game. It was available for about three months only (I don't know whether he meant on its own or not). Now you can only buy it on the compilation, since the company (Codemasters) has stopped producing the game on its own. At the moment we are out of the compilation.

So do I have to fork out ten weeks' pocket money to buy games I have already got? Or did the man get it wrong and I can still get *Magic Land Dizzy* on its own (somewhere in this universe).

Benjamin Yeoh
Ham
Surrey



• *Magic Land Dizzy* (Dizzy 4) is available on the Dizzy Collection. But it is available on its own...

AA: I think you're friend in Smiths doesn't know what's going on, Benjamin. I phoned Codemasters - although *Magic Land Dizzy* is currently available only on compilation, it will be out shortly on its own.

No, no, no, no, NO...!

I have just received the December issue of AA and I'm not in the slightest bit happy. I've managed to put up with the last few issues, but now I feel I must complain.

Things appear to be going downhill for AA, and I'm not just talking about circulation figures. (Circulation is going up, actually - we're just waiting for the results for July-December 1990 to be confirmed now - ed)

My beloved AA seems to be turning into a games magazine, where anything which sells for £15 and has green fluffy aliens in it will get featured. You're almost as bad as ACU, and I'm not joking.

You're making the CPC out to be a games machine, which it isn't. (Try telling Amstrad that, James) I know games have improved ten-fold since the CPC was originally released, but if all people want is a games machine, then they ain't gonna buy a CPC Plus. They'd buy the Sega Megadrive, or the Amiga etc.

The CPC Plus range is aimed more at the games player, what with the improved internal workings, but that doesn't mean 'normal' CPC games are any better.

Don't get me wrong - I love to play a game now and then (I think *Turrican* is amazing, when it works), especially games which make you use the old grey cells.

Forget the competitions, they don't make people buy AA. If you have to have competitions, make them worthwhile - whoever writes the best application program wins, or whoever has the best idea - none of these stupid questions which no-one gets wrong!

More serious reviews, please, and don't say there isn't any serious software - there is tons (literally) in the public domain. Why not review a program I've written called *The Character Designer*? You can get it from Scull PD.

That reminds me - enlarge the public domain feature, please (mustn't forget my manners) and stop rabbiting on about legal positions and get down to some serious reviewing.

Where's the little black book thingy, the Soft 968 clone? You said someone was going to do it and it should appear soon.

More cover tapes, but not just filled with games. I would be willing to pay the price rise it would cause - it wouldn't be much more to pay each month.

How about a CP/M tutorial, which actually gets you past basics and well into the advanced region.

And finally, here is an amazing idea. How about a really polished program which everybody writes? A good example is a Disk Management program; you provide a menu (format, recover erased files etc (you get the idea) in one issue, and people send in sub-routines (those who can't program send in ideas) which over a number of issues will build a complete program. People can still send in amendments to polish it off. With everybody working together it could reach commercial quality.

So come on now, CPC users could become

a great team. Come round to the idea that the CPC is not just a games machine, OPEN YOUR EYES, the CPC still has great potential. Don't waste in just on games.

James Neill
Wakefield

AA: Crikey James, you reckon on knowing a lot about a lot of things, don't you?

You're quite wrong about our circulation figures, as I say, and as for AA turning into a games magazine, I would point out that in this issue, for example, the Amscene, Reaction, Forum, review, 3D Programming, Ask Alex, the DTP feature, Type-ins and Free for All sections add up to a total of 26 pages. And you still reckon it's turning into a games mag...?

You seem to think that games players are a breed apart from 'normal' users, but just because people want to play games, that doesn't mean they don't want to do other things with their computers too. Try bashing out the odd letter or school report, or fiddling with BASIC on a Megadrive! And Amigas are OK if you don't mind forking out £25 for each game and can afford the £400 asking price (without monitor, I might add).

As for your remarks about competitions - rubbish! The response to our competitions is overwhelming. The reason we don't make the questions tougher (except for specialist pieces of kit that deserve to go to good homes) is because we're running a magazine, not a postal college!

More serious reviews? Right. So let's see some more software. You think your character designer is good? Send it to us then! Since we're now putting a covetape on every issue, we need some decent serious routines.

Enlarge the public domain section? We will if we get the demand. So far, you're the only one to ask. By the way, we showed Caroline Lamb your letter and she looked a bit frosty. Your criticisms have been noted.

The little black book? Alas, Pat MacDonald, who was working on it is now so completely tied up with his new job on *Amiga Format* that he hasn't time to complete the project.

More cover tapes? ... I think we've covered that one already. The CP/M tutorial is OK for an idea, but what about all those 464 owners with no disk drives?

And finally, your amazing idea. Hmm... I think a professional software house would have enough trouble pulling together the resources of half a dozen different programmers, let alone a magazine. You could always try it out for yourself, James...

Sure, the CPC is a great all-round machine. But what we don't want to do is artificially distort our reporting of the Amstrad market in an attempt to convince all those CPC users that there is a booming and vigorous serious market when we don't think there is - a couple of years ago, maybe, but not now. A single magazine can't change the industry, but it can alienate its readers. I think we have got the balance just about right.

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Got any technical queries? Are you stumped by your computer? AA's very own technical wizard ADAM WARING will attempt to sort it out for you. Or maybe you want to pass on some tip you've discovered to the rest of us? (Send us a good 'un and you could be in line for a £25 mail order voucher!) Write to: Forum, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

User area

I've recently bought a disk drive for my CPC464, and even though I'm tremendously pleased with it, there are a few problems. From what I've managed to pick up from reading this (excellent) magazine, CP/M allows you to create user areas, rather like folders for keeping programs separate in an ST/Amiga type desktop (yech). I've read the manual that comes with the drive from cover to cover, but can't see how to implement these. Can you help? Are there any manuals I could get to help me get the most from CP/M?

I've also been having problems with the screen output from my CPC. I use an MP2 modulator and a B/W TV. When I first switch on everything's fine, but after half an hour some of the colours get darker, as though changed with an INK command. (I can't tell if they really do change, 'cos of the B/W TV). This happens even if no programs are running. Tapping the case of the computer sorts the fault, but any slight vibration, such as using the keyboard, brings it back. I thought it might be a loose connection, but I couldn't see any, and no amount of tapping can cause the fault to occur within the first few minutes.

I can't afford a repair bill, so can you help? I think it may be the CRTC which is faulty, which I can afford to replace. What do you think?

Sam Gilmour
Scotland

There are 16 user areas built into the AMSDOS operating system, which means you can select them from BASIC. An extended command (RSX) is used to access them.

IUSER,[user no] changes the user area to the number shown.

The default area is zero. So:

IUSER,1:SAVE "filename" saves a program to user area one.

Your problem with the colours going funny sounds like a loose wire type of fault to me, rather than any of the components breaking down. (We have a similar problem with the CPC464; the screen suddenly goes darker and

27 97 2 - Ragged left (right justified, useful for addresses).
27 97 3 - Fully justified between margins.

You will need to programme keys to produce these, or to insert them in an initialisation routine such as a printer driver. Having done that, the sequence 27 108 10, 27 81 77, 27 97 3 will produce full justification to a line length of 6.7 in with a 1 in margin. Setting the screen margins to 1 and 75 then produces 75 characters a line, which on my printer fit nicely into a line length of 6.7 in.

The text then comes out proportionally printed and justified. Compared with normal printing, it is superior in two respects. The spacing between characters is constant, so that you don't get 'i's standing all forlorn while adjacent 'm's rub shoulders, and in each line the spacing between words is the same, unlike normal justification with its variable gaps between words.

You may need to play about a bit with the number of characters a line to suit your particular printer. It's not very critical, but too many can cause a line with a lot of broad characters to overflow and too few can cause the text to be stretched out unduly.

Mike Catton
Hants

I don't know how to thank you. Yes I do.
Here's £25.

Novice problems

Please help. For Christmas my husband bought me an Amstrad 464 Plus. As we are all novices in our family I bought your magazine - January 1991 issue - as it was easy to understand. Is this machine just for games? The salesman that

Sound advice

I have discovered that there is a Sound Digitizer built into the game Amstroids. Amstroids is published by Swift Software and appeared on their games compilation Swift Selection Plus and also on an old CPC Computing covertape.

To load the Digitizer, type the following with the Amstroids tape/disk in the tape deck/disk drive.

- (1) MEMORY &27FF
- (2) LOAD "AMSTROID.SND",&A000 For Swift Software Selection or;
- LOAD "AMSTROID.S3",&A000 For the covertape
- (3) CALL &A000

Once you have loaded the digitizer, it provides you with these two new commands:

IR,&2000,&4000 To digitize the sound
IP,&2000,&4000 To listen to the sound

And to save it to disk or tape, type:

SAVE "sound",B,&2000,&4000

Of course this is just an example of what can be done. You can store sound at different addresses, record it at different speeds, and play it back at different volumes.

I hope this is of some use to your readers with the game Amstroids.

Robin Sergeant
Devon

Sterling stuff, Sir.

sold it to my husband said it could do more.

For my own personal use I would like to be able to use it as a simple wordprocessor but I haven't a clue what hardware I require. All software seems to be on disk.

I also sent for some educational cassettes for my young daughter. I read in the *AmScene* section that the Plus range was having trouble accepting some programs, does this mean they will not work?

One last thing, does the cartridge have to be inserted or can the computer be used without it being inserted?

Thanks for your help - I am just a 'thick Mum' that doesn't want to be left behind when my daughter starts school.

Mrs L Bradford
Bristol

Your 464 is indeed capable of far more than just playing games. However, most of the serious software available does rely on a disk drive being present.

Mini Office II is a simple word processor - in fact it is a whole suite of simple 'business' programs, and it's available on cassette, you'll be pleased to know. Contact *Database Software, Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP*. Tel: 0625 859333.

A small minority of software is incompatible with the Plus computers. These are mainly programs which use technical tricks that they shouldn't. I doubt that the educational programs you ordered will be affected.

Yes, a cartridge does need to be inserted for the machine to work.

Out of key

Please help me as I am desperate. I have owned a 464 for just over a year now and recently the keys 2,3,5,7,9,{-,},copy and right arrow have stopped working completely! Is there any way I can repair it without going to the repair shop?

Bernard O'Leary
County Cork



Broken keyboard? It might sound serious, but it may nevertheless not be as bad as you think. With a bit of luck it could be nothing more expensive than a broken wire or bad connection.

It sounds like a broken track or wire to me, Bernard. Unless you know what you're doing, though, I'd strongly recommend that you take it to someone who does. And if it is as minor a fault as I rather suspect it is, then it shouldn't cost too much.

Disk expansion

I am a proud owner of an Amstrad CPC 464 and I use it for typing letters for my Dad's business.

I want to upgrade to disk but will I need a memory expansion or not? If not then what disk drive should I buy and how much will it cost? If I do need an expansion how much will that cost with a disk drive?

I hear that the 664 is out of date because it has a disk and it's only got 64K, so would this be the same with 464 or not?

Martin Elliot
Hants

You'll need a DDI-1 disk drive and interface to connect to your 464. The list price is around £150, but various mail order suppliers who advertise in this magazine are offering them for much less.

You won't require a 64K memory expansion for normal use - although certain programs will require a full 128K of memory.

The 664 isn't out of date exactly, it's just that it's been superseded by the 6128 which offered the extra memory for the same price. The old 664 is still a perfectly useable computer, and loved by many.

What are you driving at?

For some time I have had a CPC464 and colour monitor with DDI-1 and Multiface II. I have recently acquired a CPC 6128 with a defunct green monitor. Since my colour monitor has no 24v output for the disk drive, I obviously need an MP2 modulator to use the colour monitor with the 6128. Is it possible, however, to use the DDI-1 as a second drive (or indeed as a first drive if the MP2 is not used)? I realise that physically there is a problem in attaching the interface to the expansion port, but this would be solved by the fact that it would be behind the Multiface, thus moving it away from the 5v and monitor leads. If it is not possible to do this with the DDI-1 interface in place, could the interface simply be removed and an edge connector for the 2nd drive port soldered on? One final thought; how about making up a lead to connect between the 2nd drive plug on the DDI-1 cable and the 2nd drive port of the 6128 and not using the interface at all?

M. H. Dashper
Essex.

The 6128 needs a 12v (not 24v) power source in order to operate the disk drive. This is indeed supplied by the additional socket that comes on the 6128's monitor.

The MP2 modulator provides the connections required to power the 6128 and link it to a television set. (However, all you need is the extra 12v supply. You could ask your local electrical retailers if they can supply a 12v power supply that delivers 400MA with the correct plug to connect to your computer.)

You can connect your 464's disk drive as a second drive for your 6128. All you need is a suitable cable - Amstrad's DL-2 or equivalent.

Note that you won't need the interface bit at all - the 6128 already has all the necessary gubbins inside it.

In the picture

I am a young AA reader and have just got AMX Stop Press. I would like to know where I can buy a video digitizer, how much it would cost, and whether it would work with the Amstrad Video Camera (VMC 100).

Paul O'Shea
Surrey



Get real 'live' pictures into your computer with Rombo's Vidi Digitizer. The device allows you to manipulate video signals on your CPC

The Rombo Vidi Digitizer should do all you require. It plugs into the expansion port at one end and into a video camera or VCR at the other. We used it in our Multimedia feature back in AA58 (and had masses of fun while we were at it).

It will work on any video camera that has a video out signal - and they virtually all do. Check the operating instructions that came with the camera.

The Vidi Digitizer costs £69.95 from Rombo Productions, 6 Fairbairn Road, Kirkton North, Livingston, Scotland EH54 6TS. Tel: 0506 414631.

What's up Doc?

Please could you explain why my printer is printing quite different letters to what I am typing? It has just started for no reason.

I have an upgraded CPC 464 to 6128 with DDI-1 drive and a DMP 3160 printer. I also have a Multiface II in circuit and I thought maybe that was the trouble, but it makes no difference when I take it out.

I am desperate for a solution, and also is it possible the reason why it has done it out of the blue. My writing is AWFUL and I hate having to write by hand (as you would hate having to read it).

Dr Clare Jenkins
Newtown

Bit of a mystery, actually Clare. But as it used to work, and now doesn't, it rather looks like something has broken.

The best thing to do is isolate the problem. Find out what it is that doesn't work. There are three suspects: the computer; the printer; and

the inter-connecting lead. The easiest thing to do is find someone who has similar equipment, and try testing your bits and pieces connected to theirs.

Hopefully the problem will be with the lead, which is the cheap bit.

And yes, your handwriting is terrible, but that's because you're a doctor.

Write on

I really enjoy reading your excellent, value for money magazine, though sometimes your technical jargon leaves me confused as I am only 12 and fairly new to computing. I have a few questions to ask you:

1 I have typed up and saved your program 'Type-Writer' which helps you type in programs without mistakes. Having run this I was greeted with the message 'Am I a 464 (Daff Question)?' I type in the answer, '(No, because I have a 6128)' and I get 'Error in data. Please check.' I type in 'yes' just in case, but I get the same answer. I have checked and double checked, but I cannot find anything wrong with what I have written. I know it is probably a silly mistake that I have not overlooked but I would be grateful for your help.

2 Is the controller on the GX4000 console compatible with the CPC 6128, and if so, is it available separately in the shops, because I think it is jolly handy to use?

Please help me with my questions.

Adam Williams
Twickenham

1 You've made a typing error somewhere along the line, Adam. Normally I'd recommend that you go over the listing in minute detail, checking each character individually, and being especially careful that you haven't typed in the number '1' in place of the letter 'I'.

But this time I won't.

Why? Because sellotaped to the front of this issue is a cassette. And on that cassette is the Type-righter program. So all you'll have to do is load it straight in - no need to bother typing it in. Hip hip hoorah!

2 The controllers that are supplied with the GX4000 and Plus computers are fully compatible with CPCs - you'll even have the two Fire buttons working independently.

Give them half-an-inch

I have this small problem that I am sure you could rectify for me.

The problem is while collating information on my now long deceased Grandfather I have discovered that his height, a mere 5ft 5 1/2" is causing me a headache. How, when you are using a 464 with Mini Office II, can you type the 1/2 character. I have read my manual (is it only mine that the pages are in the wrong order)?

Many thanks for your help.

Martin Nash
Bristol

The 1/2 character has a code of 169. As I'm not a regular Mini Office II user, I don't know any spe-

cific tricks. But this should work for it (it does with other word processors):

```
OPENOUT "HALF"
PRINT #9,CHR$(169)
CLOSEOUT
```

Now merge the file HALF into your document. With a little bit of luck, the 1/2 character should appear. Cut it and paste it to where ever you'd like the character to appear.

Hardly an elegant solution, I know. But it works.

Oh, you think you can do better, do you? Go on then... prove it...

CPC to ST via PC

The reason I am writing to you is to see if you can help me with the following problems:

I am at university doing first year computer science, for which we use Atari STs and a Pascal compiler for programming. My question is: If I buy a Microstyle 3.5" second disk drive for my 6128+, what software would I need to put any programs I wrote using Polypascal onto a format readable by the ST? I know that the ST can read ASCII files from IBM PC format disks, so can you recommend a piece of software suitable for the job?

Another problem I have is with my Quickshot II Turbo joystick. One of the microswitches inside the thing has broken and I can't seem to get through to the manufacturers to see if I can get a new spring for it. Could you supply me with the name and address of the company currently manufacturing the stick?

Robin Brown



Want to get info from your CPC to an ST? The ST can read PC format disks, so you can use 2 in 1, the CPC to PC transfer utility

I'd recommend a program called 2 in 1 available from Microstyle, which is designed exactly for the purpose you require. Files can be transferred between your CPC and a PC (hence an ST) quickly and easily. 2 in 1 costs £24.95 from Microstyle, 212 Dudley Hill Road, Bradford BD2 3DF. Tel: 0274 636652.

You should be able to buy a replacement microswitch from any electronics supplier. In any case, Quickshot are handled by Spectravideo, Unit 27, Northfield Industrial Estate, Beresford Avenue, Wembley, Middlesex HA0 1NU. Tel: 081 900 0024.

Yes man

I am writing to ask you some questions on the 464 Plus.

- 1 Do CPC464 games run on the 464 Plus computers?
- 2 Can you put a joystick on to the 464 Plus?
- 3 Are the graphics or sound any better on the Plus machine?
- 4 Is the cartridge the only difference between the CPC 464 and 464 Plus?
- 5 Is the 464 Plus better value than the CPC 464?

M Smith
Herts

1 Yes. 2 Yes. 3 Yes. 4 Yes. 5 Yes.

You can bank on it

I have a 464 with DD-1 and wish to purchase a 64K memory upgrade but I have some questions about it.

- 1 In Datel Electronics advert it says 'Bank switching done automatically by software (cassette 464 - Disk 6128). Does this mean I have to load software before I can make use of the extra memory. If not, what does it mean? And can I get it on disk for a 464?
- 2 Will this extra memory enable my 464 to use the extra commands available only to 6128 users, or is a ROM required to do this?

Nick Walton
W. Yorks

Normally you are unable to use the extra memory that's available in expanded machines for your own purposes - this is true of the 6128. Only specially written programs designed to exploit the extra memory are able to use it.

Datel are providing software with their memory expansions to enable you to do this from BASIC. (This is especially important for their 256K memory expansion as there are no commercial software packages that use this amount of memory.) And so to use it you first have to load it in form disk or tape.

It won't make your 464 100% compatible with the 6128's extra commands. You do indeed need to buy a plug in 6128 ROM to do this.

Maths fun

Re: Russell Doano's query about mathematical graphs (January, p.26), PD1 Disc from DW Software, 62 Lascelles Avenue, Withernsea, North Humberside, HU19 2EB

includes two such programs. Even if they are not exactly what he wants, the f6 charge will still have given him an idea of how to write what he wants himself and a disk of interesting programs to explore.

John Hudson
Huddersfield

Thanks for the tip John.

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Programming in three dimensions

CONRAD BESSANT concludes his mini-series on 3D programming with a look at colour-switching, shading, perspective and more...

If you have been following this series you should now know how to apply matrix techniques to simple three-dimensional animations. So far, however, we have been limited to simple animations due to the over-simplification of the colour switching routine used and the fact that the examples have been written in BASIC.

The first thing to work on is the colour switching. Previously, all of the animation frames were calculated at the start of the program, and each was drawn on the screen in a different MODE 0 screen ink. The illusion of movement was then created by illuminating each frame in turn by setting its ink to the foreground colour. This proved very fast, good for demonstrating the general principles of vector graphics, but with its limit of 15 frames and one colour it is rather too inflexible for any serious programs. Another disadvantage is that pixels go missing where two or more frames overlap.

Screen switching

One way to overcome all these problems would be to use screen switching. The simplest method for doing this would be to have two screen areas in RAM; a 'real' screen, which you actually see, and a 'hidden' screen. New animation frames could be drawn on the hidden screen, and then copied to the real screen when complete. As well as making the animation smoother by keeping all object construction out of sight, all of the available colours could be used because colour switching would be completely avoided.

The problem with screen-switching is that it uses up a lot of memory (another 17K of RAM must be set aside to act as the hidden screen), and a good machine code screen-switching routine would probably have to be written, the ones provided in the Bank Manager suite supplied with the CPC 6128 are not all that smooth, and don't work with the 64K machines.

There is, however, a method of colour switching which allows all object constructions to be hidden from view without using any extra memory. The key to this method is that instead of using two screen areas to store the frames, both the latest completed frame and the one under construction are stored on the real screen at the same time, but only the completed one is visible. At first this sounds very difficult to do, but in fact it can easily be done using normal BASIC commands.

The best way to demonstrate the technique is

by way of a simple example. Figures 1.1 to 1.3 show a magnified section of the screen during one animation cycle in such an example, where the addition of a new frame is creating a troublesome crossover point. We start the cycle with a line from an old frame already on the screen, drawn in ink 1. The new animation frame is then drawn in ink 2 using the OR ink mode. This creates the situation shown in figure 1.2. Note that the crossover point becomes ink 3 due to the ink being ORed. It is this third ink which allows us to differentiate between normal pixels and overlapping ones. Figure 1.3 shows the removal of the old line. This is done by drawing it again in ink 2 using the AND ink mode. Using AND means that the ink 3 part of the line, the crossover, now becomes ink 2 to match the rest of the new line, and the old line now becomes ink 0 (i.e. it gets deleted). The process now repeats for the next frame, this time with the original line (the one added in the last cycle) being in ink 2 and the new line being drawn in ink 1. The OR and AND ink modes may seem a bit confusing at first, and you may want to consult your BASIC manual for full details, but in this case the only operations we need to know are:

```

1 OR 2 = 3
1 AND 2 = 0
1 AND 3 = 2
2 AND 3 = 2

```

• Note that AND and OR are commutative so, for example, 1 OR 2 and 2 OR 1 will both give the same answer.

This technique does not look immediately useful, as the frames under construction can easily be seen. But with the addition of a bit of simple colour-switching, a very effective animation routine can be achieved. Before the process starts, inks 1 and 3 should be set to colour 25 (foreground) and ink 2 to colour 1 (background).

This means that the new line will be invisible when drawn in figure 1.2, except for where it crosses the old line, where no change will be seen because ink 3 looks just like ink 1. However, once the new frame is invisibly in place, ink 1 can be set to 1 (background) and ink 2 can be set to 25 (foreground), making the new frame immediately visible instead of the old frame. Now obsolete, and out of sight, the old line can be removed as in figure 1.3. Figures 2.1 to 2.4 show the final sequence of events, including the ink swapping.

As you may have guessed, this animation

technique is not unique to three-dimensional scenarios, and indeed the example given in listing 1 (overleaf) simply uses a rotating line to demonstrate its use. The important animation lines are as follows:

```

10...sets up the initial ink colours using the INK command
30...draws initial frame (you must start with something)
50...determines which ink is associated with the 1st colour
60...determines ink for the second colour (col2%)
90...draws the new frame (in second colour using OR)
100...swaps the colours over (as in figure 2.3)
110...removes old frame (by drawing in 2nd colour using AND)
120...stores latest frame position for future removal in 110

```

If you RUN the program you can see that although the movement of the line is jerky, the actual switch between frames is very good. Unlike previous animations in this series, no pixels are missing from this one. The centre of rotation is the best point to observe this. Also, this animation has forty frames. In fact, using this method allows an infinite number of animation frames to be used.

Note that, to increase speed, numeric variables have been suffixed by a per cent character (%) wherever possible to indicate that they are integers.

The variables col1% and col2% hold the ink numbers for each of the two drawing colours (referred to in the diagram as inks 1 and 2). Variables are used because the inks they represent change between 1 and 2 on alternate animation cycles.

The ink and ink mode are both specified in the DRAW commands of lines 90 and 110, this eliminates the need for the rather laborious GRAPHICS PEN command. The ink and ink mode are passed to DRAW using the command's full syntax, which is:

```
DRAW <x>,<y>,[<ink>][,<ink mode>]]
```

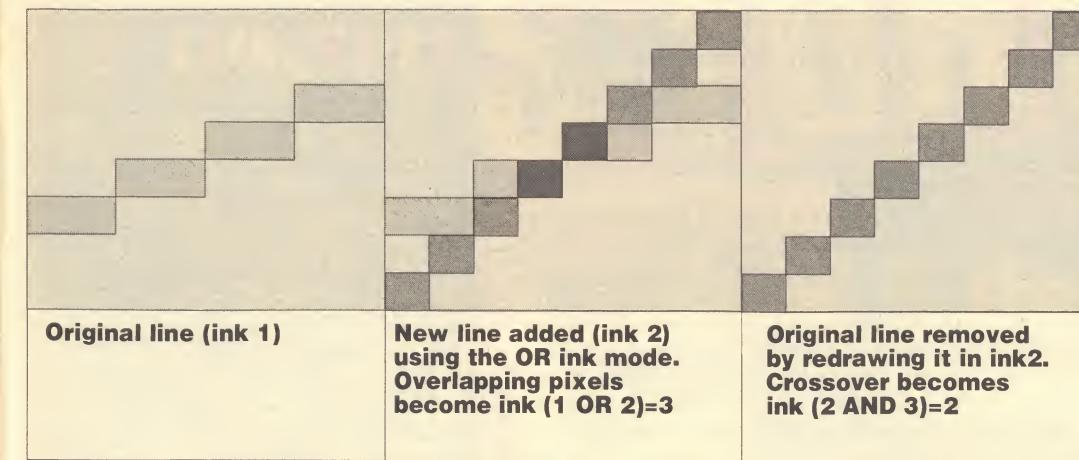
where <ink mode> is one of the following:

```

0: Normal
1: XOR
2: AND
3: OR

```

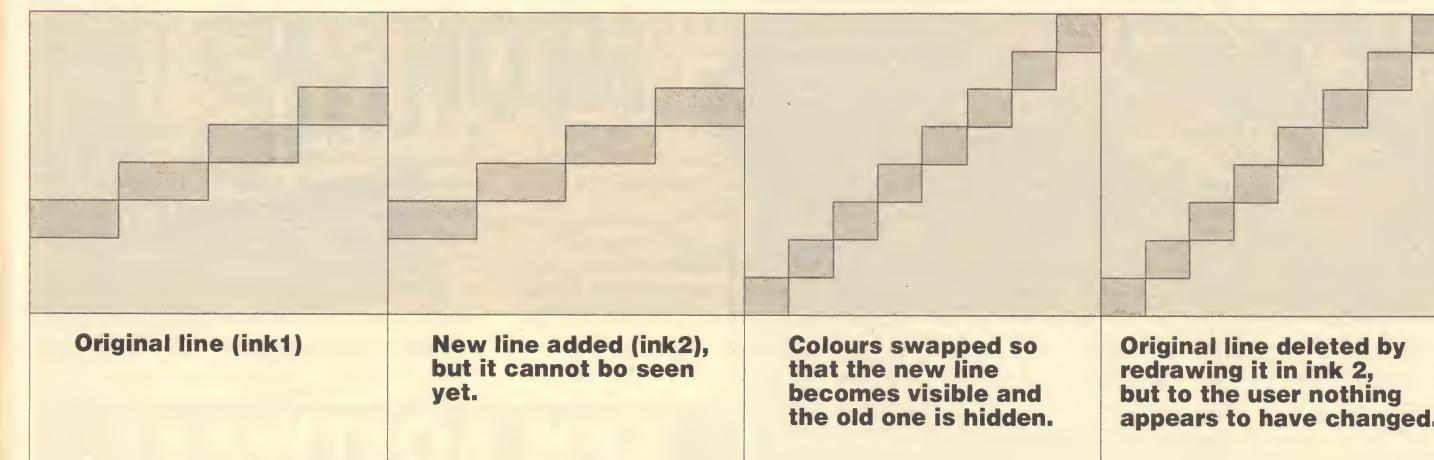
Mode 1 is the highest resolution mode in which you can use this animation technique, as a minimum of four inks are required. However, if



1.1

1.2

1.3



2.1

2.2

2.3

2.4

- A short animated routine showing one line replacing another without using screen-switching techniques and without having two lines on-screen at once.

Timetable for one animation cycle

OBJECT BEING DRAWN	INK	INK MODE	PALETTE CHANGES	DESCRIPTION
			INK 0,1 INK 1,25 INK 2,1 INK 3,25	SET INITIAL COLOURS
OLD FRAME	1	NORMAL		DRAW STARTING FRAME
NEW FRAME	2	OR		DRAW NEW FRAME
			INK 1,1 INK 2,25	SWAP INKS 1 AND 2
OLD FRAME	2	AND		REMOVE OLD FRAME

THE PROCESS NOW REPEATS FOR THE REMAINING FRAMES, WITH THE 'NEW' COLOUR 2 FRAME BECOMING THE 'OLD' FRAME

PROGRAMMING

you use mode 0 you still have inks 4 to 15 available for other objects on the screen. Note that if you want to simultaneously animate objects of different colours you will probably need to reserve three inks for each one.

This animation technique should prove fairly easy to incorporate into the 3D programs given in the previous articles in this series. A timetable for one animation cycle is shown in figure 3 to aid this. Something important to remember is that you will have to store the matrix describing the animation frame on each cycle so that it can be erased in the next cycle, when it becomes redundant.

Other Enhancements

The advanced colour switching techniques introduced above slow our animations down immensely because calculation is done in real time, and each frame must be drawn twice (the second time is to remove it). BASIC, although good for demonstrating principles, is really too slow for any serious 3D graphics. Machine code is the only option if you are seeking real speed. However, machine code matrix manipulation may be quick to run, but it is far from quick to write. The floating point routines associated with the rotation and shrinking of objects are some of the most difficult things to code, and you would probably need to have been programming in machine code for a few years before even attempting such a project.

Floating point methods can be avoided by using integer matrices, which would even speed up 3D BASIC programs quite considerably. However, this magical solution is not that easy to implement, and a detailed knowledge of

matrices and general maths is first required. It is the difficulty involved in developing reasonably fast and effective three-dimensional routines which has meant that games like Stunt Car Racer appeared so late in the CPC's life.

Shading

Solid, shaded 3D objects are among the things which make some 3D games stand out from the crowd. Such shading is mathematically very difficult to do, but the software houses have of course simplified the maths in order to increase the speed. The basis of most 3D shading algorithms is a technique called ray tracing. As the name suggests, shadows, shading and reflections are calculated by tracing the paths of imaginary light rays. In the most advanced ray tracing systems, objects can be given textures from which light rays reflect in different ways.

Perspective

The method described last month to display 3D objects did not support perspective drawing, this can lead to undesirable effects such as objects appearing to change shape, and should be rectified in a full vector graphics implementation. Adding perspective is actually a fairly trivial job, the only change is that the scale in which the object is drawn should be proportional to the perceived distance from the user (i.e. the z position of the object).

Collision Detection

With normal 2D sprites you can check the screen memory to see if two sprites are touching, but in 3D programs objects that touch on the screen could be far apart (in front of one another, for

LISTING 1

```

10 INK 0,1 : INK 1,25 : INK 2,1 : INK
3,25
20 MODE 1 : ORIGIN 320,200
30 MOVE -200,0 : DRAW 200,0,2,0 :
oldx% = -200 : oldy% = 0
40 FOR loop% = 1 TO 40
50 col1% = (loop% MOD 2)+1
60 IF col1% = 1 THEN col2% = 2 ELSE
col2% = 1
70 xx% = loop%*10-200
80 y% = SQR(40000-xx%*xx%)
90 MOVE xx%,y% : DRAW -xx%,-y%,col2%,3
100 INK col1%,1 : INK col2%,25
110 MOVE oldx%,oldy% : DRAW -oldx%,-
oldy%,col2%,2
120 oldx% = xx% : oldy% = y%
130 NEXT loop%

```

example). The only reliable way to detect 3D collisions is to refer to the object matrices to check where objects are – there are no short cuts.

• A full 3D graphics system including all of these enhancements would take a long time to develop (as many software houses already know!) and a full description of such a system really requires a whole book rather than a series of articles.

Hopefully, however, this series has succeeded in its aim of explaining the general principles on which most 3D systems are based.

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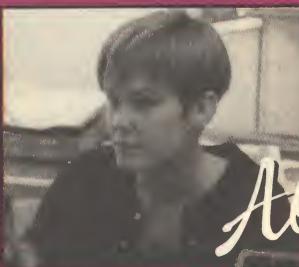
Ask Alex

Hi! And welcome to the page where beginners can write in without fear of ridicule. So keep 'em coming - I won't 'dis' you, and that's a promise! (That's my younger brother's favourite expression at the mo!)

Anyway, down to business. As well as answering all your usual questions and queries about your Amstrad, I'm starting a brand new section on learning to program in BASIC. Loads of you have written in complaining that the manual is too hard to follow. (And I'd agree - it doesn't do the newcomer

any favours!) So, I thought I'd start my very own tutorial to show you how it's done! (And who knows? It might be your programs appearing in a future Type-Ins!)

Anyway, I hope you enjoy it, and don't forget: if you're stuck on a problem - no matter how small - let me know and I'll do my best to answer. See ya!



Alex

Return to Sender

Mike Brown (of AA65 fame) has yet more questions that need answering:

● "First of all," he wonders, "where on Earth is the RETURN key so often mentioned in games instructions?"

I'll just bet that you have a 464, Mike! Although the keyboards are exactly the same as far as the computer is concerned, they're laid out quite differently on the CPC464 when compared to the other models. Some of the keys are labelled differently, too.

The RETURN key is one such example. This is actually marked ENTER on the CPC464. (There are in fact two ENTER keys on the 464, we're referring to the larger, odd-shaped one. The other one is often referred to as the small ENTER key.)

Other keys that might cause confusion are the 6128's CONTROL key (CTRL on the 464), and the keypad keys which are prefixed with an

italic 'f' on the 6128, but left as just plain old numbers on the 464.

● "Why do games only use a small portion of the screen, and not the full area?" is Mike's next question. "Is this because the 64K memory would be used up with graphics otherwise?" He goes on to say, "If so, do games for the 6128 use more of the screen?"

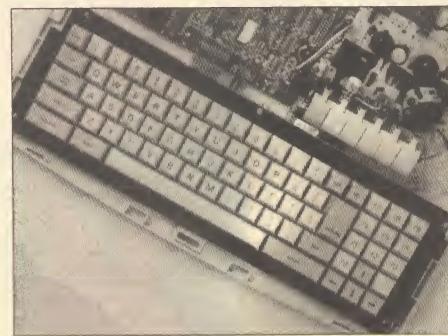
Well, I'm no programmer, Mike. But as far as I'm aware, smaller screens are used for reasons of speed, rather than to use the computer's memory efficiently. It's quicker for a program to display stuff on a smaller screen area than on a large one (there's less information to update, you see).

● Mike's last question is regarding disk drives. "I would appreciate a run-down of the differences between 3-inch, 3.5-inch and 5.25-inch drives."

Right then. All disk drives work more or less



● The keyboards may look completely different, but they're the same as far as the computer is concerned. Some of the keys bear different legends too!



The Poke Folk

Shane Matthews, Michelle Lynch and Jay of Kippax all have similar problems! It's that old favourite again, the Poke!

"How do you find them and how do you write them?" is the question that they're all anxious to have answered.

It's not easy, I'm afraid! To write a poke you need to know all sorts of complicated techie things - the dreaded machine code and all that.

You'd have to knowledgeable about how programs are written and you'd have to be able to recognise all the numbers and translate them into the machine code instructions. If you wanted to make an infinite lives poke, for instance, you'd have to find the bit of the program that decreases the number of lives you have, and alter it so that it doesn't any more.

Sorry, but I can't be much more help than that! (Even thinking about machine code sends me dizzy!)

Shane also wants to know what football team I support. To be honest, Shane, I'm not all that interested in footie - unless Gary Lineker's playing! (He's got lovely legs!) Oh, and John Barnes - 'cos he was in the New Order Eng-er-land song. So I guess I'd have to say 'Spurs and Liverpool!'

in the same manner; a spinning magnetic disk is read and written to by a disk drive head (rather like the one in a cassette recorder). The different sizes refer to the size of the disks that fit in the drive. A disk of one size won't fit into a drive of a different size - it's physically the wrong shape!

The 'official' Amstrad disk drive uses 3-inch disks. All commercially available software for the machine that comes on disk will only be available in this size.

Other sizes of disk drive are available for the Amstrad. The advantage of these is that the disks have higher capacity (they can store more programs or data files on them), and they are cheaper too.

Many people buy these larger disk drives as a second drive because of these advantages. However, it's not possible to operate one of these larger-capacity disk drives without firstly installing the Amstrad drive. (Besides, there'd be little point - you wouldn't be able to use any of the commercially-available software in one of these drives anyway.)

If you're thinking of expanding your 464 to include a disk drive, then you'll need to purchase a DDI-1 Disk Drive. This includes an interface which plugs between your computer and the disk drive. Amstrad has stopped making these now, but if you hunt through the mail order adverts in AA you might still be able to pick one up at a good price.

There is a further complication: although bigger drives are available, they won't work to full capacity directly with the operating system supplied by Amstrad. Instead, you'll need to use an extended operating system for the fullest benefit. (This is explained further in last month's column under the RAM and ROM item.)

Basic BASIC

"I'd like to learn to program, but the manual's just too flaming complicated!" That's the overwhelming message I get from all you desperados out there. And you know me, I can't resist answering that cry of help!

So have no fear, Alex is here! Over the coming months I'll be running a mini BASIC tutorial. At the end of it you should - no, will - be able to write your very own BASIC programs!

BASIC is the programming language that's built into your Amstrad. It's an acronym for Beginners' All-purpose Symbolic Instruction Code. (Not a very friendly name in full, so we'll stick with BASIC!)

When you switch on your computer, a flashing square appears on the screen. This is the cursor. Type anything in, and the text appears at the position of the cursor. The cursor moves to the left after each character is typed, ready for the next one to be input.

For the computer to interpret what you've just typed you need to press the RETURN or ENTER key. This must be done at the end of each line. If you've just typed in a load of garbage, or any words that the computer does not understand, it'll come up with a Syntax error message. This is the computer telling you that it can't make sense of what you've given it. Enough of the theory - let's get started. Type in:

Alex says Hi [ENTER]

The computer will respond with a Syntax error message. Although the words you just typed were perfectly understandable to you or me, the computer doesn't understand them. It can't understand English - that's not its language. You have to communicate with it in BASIC!

BASIC has a built in vocabulary of words that the computer can understand. These need to be typed in exactly right for the computer to be able to act upon them. The teeniest mistake - just one letter wrong or missing - and the computer will fail to recognise the word.

Type in this line:

PRINT "Alex says Hi" [ENTER]

This time the computer should have printed those immortal words on screen. This is because it understands the command that you've given it, and so can carry out the proper actions. PRINT is the BASIC command to output information onto the screen.

But it's not just about giving the correct commands to the computer. You have to give them the correct context too. Give this a go:

PRINT Alex says Hi [ENTER]

The results are most peculiar! Three zeros appear instead of the text! The computer interpreted the command perfectly, but because the context was wrong (no speech marks), it didn't PRINT what you might have

expected it to. Enclosing text in speech marks tells the computer to treat it as such - text to be output to the screen.

But that doesn't explain why the computer has printed those numbers, though. Well, by omitting the speech marks you've instructed the computer to treat the words as numbers. (Yes, I know it's confusing. All will become clear later on!) Try this:

Alex=1 [ENTER]
says=2 [ENTER]
Hi=3 [ENTER]
PRINT Alex says Hi [ENTER]

Now the computer has come up with the numbers 1 2 3. This introduces one of the fundamentals of BASIC - Variables. (Fanfare please!)

What you have just done is assigned three numbers to three variables. You have given Alex a value of 1, says a value of 2 and Hi a value of 3. When the computer prints these variables it looks up the numbers they represent.

You can manipulate these numbers mathematically too. So for instance:

PRINT 1+2+3 [Look, you know about the ENTER bit by now, so I'll quit mentioning it!]

will print the result 6, as will:

PRINT Alex+says+Hi

There are, of course, a number of mathematical symbols you can use. As well as addition (+), there's subtraction (-), division (/) and multiplication (*). (Note that the times sign is an asterisk, rather than the traditional x sign. This is to differentiate between the letter and symbol.) There are many more maths functions that can be used, but we'll stick with the basics for the time being.

You can mix both text and numbers on the same program line. Try this:

PRINT "Alex says" Hi

Lo and behold, the Alex says bit appears on screen (as it was in quotes), followed by the number 3 (because the Hi bit wasn't, and so it's evaluated as a number).

That's it for this month. I hope it's made things a bit clearer. Next month we'll look at a few more commands (after all, there's only so much you can do with just the one!). We'll also look at knocking together a listing...



● Do you find the manual too confusing? Learn the basics with Alex's guide for absolute (computer) dunces!

Cover up!

Bill Hudson, from Leigh in Lancs, has been having a spot of bother transferring his covertape to disk. He managed to run the Tape-disk transfer program, but couldn't run the games once they'd been transferred. Indeed, some of the files seemed to be missing entirely.

This is what I think has happened, Bill. The transfer program copies across the programs one at a time. Once it's loaded them from tape, it takes quite a few seconds to save them to the disk.

If, as I suspect, you're using an external cassette recorder, the tape will run on past the beginning of some programs while it's saving to disk.

To prevent this from happening, you should ensure that you connect the REM plug into your cassette recorder's REM socket. The computer will then switch the cassette off while it's busy.

Unfortunately, some tape recorders don't have such a socket. In this instance you're going to have to be very careful when you transfer the programs. When the computer is saving to disk you'll hear a click and see the red light on the disk drive come on. When this happens, stop the tape immediately, restarting it when the computer has finished saving (you'll hear another click, and the light will go off).

It's a bit fiddly, but thankfully it'll only have to be done just the once for every tape you transfer!



● The covertape easily transfers to disk. You just have to be careful if you don't have a REM facility on your tape recorder

STUCK ON THE BASICS?

Queries? Questions? Conundrums? Why not Ask Alex? She'll do her best to help you out. Write to her as: Ask Alex, Amstrad Action, Future Publishing, Beauford Court, 30 Monmouth Street, Bath BA1 2BW.



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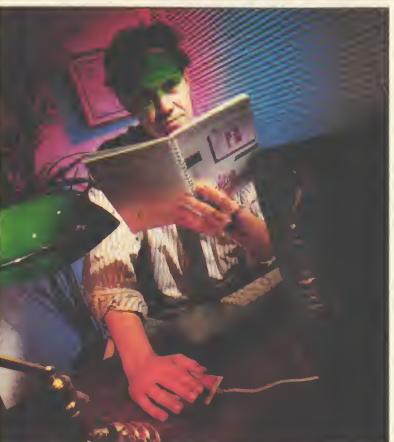
Desktop publishing is one of the favourite buzz-phrases of the computer world. But what is it, and just why is your

As you read this page you are looking at an example of desktop publishing. Every edition of *Amstrad Action* is laid out using a computer, and sent off ready for printing, complete with text and pictures.

Admittedly the computer used is an Apple Macintosh, and not a CPC, but it does show how thoroughly desktop publishing is taking over the publishing industry.

And it's not surprising. Computers are ideally suited to the business of creating highly sophisticated page designs. They allow designers to quickly try out interesting new page layouts and to create stunning special effects, for a start.

But this is not all that DTP is about. In fact to concentrate too much on newspaper or magazine design is to ignore the fact that there is another end of the scene that is probably more important. Because it is something that anyone with a computer and a printer can get involved in.



• Your Amstrad CPC is the most powerful 8-bit DTP machine you can get, with the best support and the best software.

- You could drop a diagram or chart into a report or an essay or you might just want to draw a map of where you live to add to a change of address letter... the possibilities are only limited by your imagination.



• Most DTP packages let you use the keyboard or a joystick, but a mouse is the ideal choice for the easiest control.

Really, DTP is no more than a simple way of combining pictures and text on the same page. And looked at it from that angle there are a million other uses:

- A club secretary could design a badge or logo to go at the top of letters, membership forms or tickets. Or a small business might want a logo to put on sales literature or letter heads.
- You might want to create a more original party invitation than the usual "Dear.....I would like you to come to my party on..... at.....".



• For serious DTP you really need a 6128 with its 128K memory and disk drive. You can upgrade a 464, though.

putting your writing in columns you immediately make it easier to read and you give yourself many opportunities to make the design of your page more interesting.

What do I need?

A computer is pretty important! But even more important is a decent dot-matrix printer. One thing to remember about DTP is that if you link up the best computer in the world to a lousy printer, the results will be lousy. Hook up a good printer to an inexpensive computer and you could still get quite professional results. It may seem ridiculous to be linking a CPC to a printer that costs several times more. But the results will usually justify it.



• With a Rombo Digitiser, you can import real-life images into your pages - the resolution is limited, though.

Having said that, you can't skimp too much on the computer. DTP programs can be quite complex pieces of software needing a reasonable working memory to operate in. And, of course, you really need a disk drive - saving your pages to tape would be a nightmare!

One good investment is a mouse. Most programs are based on a WIMP (Windows, Icons, Menus, Pointers) system, where you move a cursor around the screen to point at various icons to carry out virtually every operation. With some programs this can be done with a joystick but it is definitely easier with a mouse.

Where are the pictures?

Where do you get the pictures to mix with the words? The text is pretty easy - most people have access to a word processing package and can churn out words by the

safe.



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DESKTOP PUBLISHING

thousand. But how do you get suitable pictures...?



● Scanned or digitised images aren't highly detailed, so often a simple, striking image will work best.

● If money is no problem the answer is to buy a scanner or a digitiser. These are extremely clever inventions that take a picture or a frame from a video film and turn it into a graphic file that can be loaded into a DTP program. This means that in minutes you can produce a suitable picture for any subject. However, scanners and digitisers are expensive, and do not offer particularly sharp images.

● Many people simply use photographs with desk top published pages by using a photocopier. You have to remember that even printing out one page from a computer can be quite a lengthy process, and even with a fast printer you can't hope to churn out really large numbers of copies. One simple answer is to produce one page, paste in suitable photographs in spaces left in the text, and photocopy the finished page at will.

● Another option is to use clip art (pictures produced on a computer and stored in a form that can be imported

Changing Times

When Amstrad Action first hit the streets, it was at the forefront of modern technology. All the writing and sub-editing was carried out on computer. This was then fed into a machine which produced all the text in a great long strip several yards long and one column wide.

The designers cut this strip up and stuck it down with glue on to the page. If they made a mistake they pulled up all the bits and started again. If the story was too long (or, worse still, too short) you could have to set the whole thing again. And they would print out the headings on three or four different

sizes to see which would fit.

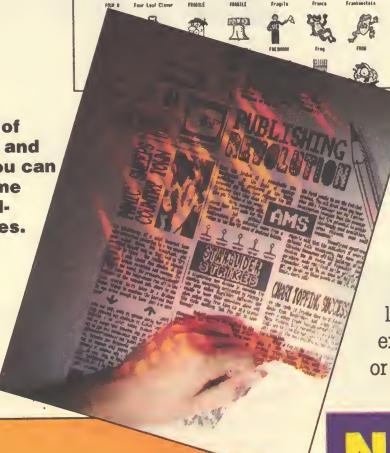
Now our designers sit in front of a computer screen, load in text files direct from the CPC and scanned picture files. They can move these elements about the page easily trying out various layouts in minutes. They can change type face and type size, leading (the space between the lines) column widths and picture sizes almost instantaneously.

And if the story is too long or too short, a few words can be added or taken out in seconds. At the end they press the right keys and a complete page is printed out!

● Clip-art libraries consist of small pictures or diagrams which can be incorporated in your pages.



● With a bit of imagination and patience, you can produce some professional-looking pages.



● The Amstrad will work with a wide variety of printers. 24-pin printers will offer the best print quality, but there may be some problems with software compatibility. And with any printer, complex pages may take many minutes to print out!

NEXT MONTH

So you want to produce your own magazine? We give you:

- Tips on type faces, layout and design
- A step-by-step guide to designing your own pages in Stop Press
- The chance to win a superb 24-pin Mannesmann Tally printer!

Don't miss it!

continued on page 34



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IMAGE WORKS, Irwin House, 118 Southwark Street, London SE1 0SW Tel: 071-928 1454 Fax: 071-583 3494



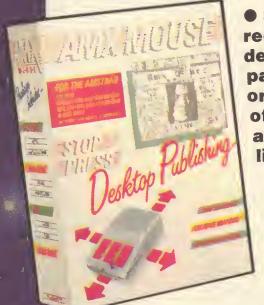
Which program?

There are a number of programs available for the CPC that come under the DTP heading. These vary greatly in cost and complexity, varying from little more than graphics packages to serious attempts at page designing packages.

Stop Press

Stop Press is more expensive than all the rest, but it does much more than the others and it does it more effectively.

It is the only package that seems to have allowed for really creative page design. There is no text editor but you can type direct on to the screen or load in a text file you have prepared in your word processor.



Before you load the text you can create a window (in effect, a box) to hold it. You can load your text into a number of these boxes. This means you can create your own columns, varying the size and length indefinitely.

There are a number of interesting fonts and, if you are keen you can modify one of these or design your own from scratch. The height and width of text can be varied in size to give really big headline text and the space between the letters can be adjusted for even more flexibility.

The program has a good graphics facility that would compare with any graphics package on the market. These graphics features can also be used to make the text more interesting. Stop Press can be used with a digitiser and has a clip art library.

However, the program is too big to hold in memory so it does have to access the disk virtually every time you call on a new function, slowing things down a little. ● Stop Press is no longer distributed by its original publisher, Database Software. Instead, check the mail order ads in Amstrad Action for availability and price. Needs 128K.

MicroDesign

It is quite easy to summarise Micro Design's DTP capabilities. It doesn't have any. Although there are MicroDesign DTP packages for the PCW and the PC, the CPC

version was designed really as a tool to help design electronic circuits and in that respect it is excellent.

To do this it has evolved quite sophisticated graphics features, especially a really quite clever method of using Icons - little designs that can be positioned anywhere on the screen. Icons were defined for each element in the electronic circuit and the user had a line drawing command to link them.

Obviously you want to be able to write details about the circuit, so a text feature was added to allow this - basically, small body text fonts. At some point it was realised that the ability to mix text and pictures is the essence of DTP.

The Icon feature was adapted to provide a form of headline text - the mysteriously named Alphamode. Each letter of the font is held as an Icon. The letters are placed individually in the same way that you would place graphics. Lining these up properly is an art rather than a skill.

This still does not make it a DTP package - there are no serious text-handling facilities, for a start. If you want to sit down and type your newsletter in on the page, it probably is possible but, frankly, unlikely. Quite a fair graphics package, though.

● Micro Design is available at £24.99 (needs 128K memory) from Siren Software, 84-86 Princess Street, Manchester M1 6NG (061 228 1831)

Page Publisher

In many ways, Page Publisher is like a simplified version of Stop Press. This can be best shown by the fact that the Stop Press has a very fancy manual more than 100 pages long. You can learn everything you need to know about Page Publisher in 18 pages (and two of those are blank!).

This does mean that you can get to grips with the program pretty easily. There are no difficult concepts to have to grasp, so you can easily take in everything in one session and be producing pages immediately.

Page Publisher has quite extensive graphics features and can set text in columns and import text files from a word processor - all the basic things you could ask of a DTP program.

You can only have three fonts available at any time, although you can load fonts pretty easily. There are 10 fonts available on disk. You can't generate bold or italic text as such, but there are special bold and italic fonts available.

Text can be varied up to five times normal size to give you headline text. And

Room in the RAM?

Most DTP programs require 128K of memory - 464 owners can get by with a plug-in 64K RAM pack.

● Page Publisher is £24.95, and is available from SD Microsystems, PO Box 24, Hitchin, Herts (0462 422897)

Fleet Street Editor

Fleet Street Editor is the odd one out amongst these programs, being aimed more at text-handling than graphics.

It is also a program that is really suited to a tidy mind. The operation of the program is divided into sections. You go into the graphics section to produce your pictures, and into the 'Copydesk' section for text-handling and page design.

This takes a bit more pre-planning than it does with a program like Stop Press, where you can literally make the page design up as you go along. What this set-up does allow is for the whole of each section to be loaded into memory at one time, so there is no time-consuming disk accessing each time you call up a different command. Having said that, the program still isn't particularly fast.

You set your own columns and can adjust them as you go along. Headline text comes in 16 or 24 point (pretty limiting, really) and there are a choice of eight

● Fleet Street Editor is geared more towards text-handling than Stop Press. The program is split into two sections - one for text-handling and one for page layout.

different fonts - four body fonts and four headline fonts. These are quite good, although there is no option to load new type faces or design your own. It also has a pretty limited graphics section.

● Fleet Street Editor is no longer distributed by its original publisher, Mirrorsoft. Check the mail order advertisements in Amstrad Action for availability/prices

Now your
money goes
even further
with Commodore.

There's a little bit of Commodore in all of us. Excitement and adventure, you saw it for yourself in our Christmas commercials. Now your money goes even further with Commodore.

Screen Gems with 1Mb RAM only £399.99



A huge leap in RAM for Amiga

Our Amiga 500 Screen Gems pack, the UK's most popular 16 Bit home computer has now doubled from 512K to 1 Megabyte of RAM. This gives even more power to educate, entertain, inspire and stretch the imagination. Yet it's still only £399.99, saving you almost £100.

Screen Gems also includes a mouse, Deluxe Paint II and four exciting challenges, including; Back to the Future II, Nightbreed, Shadow of the Beast II and the devastating Days of Thunder.

If you're looking for great Amiga value, you could even trade in your old computer for a fantastic world of graphics, animation and sound.

For just £329.99, you can now buy the Amiga 500 computer and modulator, saving you £70 on the normal price.

The C64 with joystick and games cartridge just £119.99



A spectacular fall for the C64

Undoubtedly, the world's best selling home computer, the C64 is now excellent value down from £159.99 to £119.99.

This month, the C64 brings instant fun for all the family and comes complete with joystick and games cartridge consisting of International Soccer, Klax, Fiendish Freddy's Big Top O'Fun and Flimbo's Quest.

All games cartridges produced for the C64 Games System are compatible with the standard C64 Computer. And all Commodore computers, together with a wide range of peripherals, are available at selected high street stores and at most independent computer retailers.

For full details of how you and your money can go to amazing lengths with Commodore, call 071 873 9800 or send the freepost coupon below.

All prices are inclusive of VAT.

Please complete your details and return to Commodore, Freepost 38, London W1E 6PA. Please send me details of my nearest stockist.

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Commodore
THERE'S A LITTLE BIT OF
COMMODORE IN ALL OF US

On the Grapewine...

Here's where AA gets stuck in to another month's worth of juicy games gossip. There's flyin', shootin', blastin', er, squeakin' – and it's all headed your way. AND there's tons of goodies to be won...



SUPERSKWEEK

We've just seen the follow-up to Skweek, from French Software house Loriciel. Super Skweek has to paint all the tiles that make up his planet from blue to pink – again.

The cutesy sequel features many more power-ups to collect. Unfortunately the version we saw was entirely in, er, French. We could play the game, but couldn't read a word of it. When the English version makes it over here, we'll give you a full review.

F-16 COMBAT PILOT

If you ever get the urge to steam up into the great blue yonder, wagging your joystick and shooting things, then you may fancy yourself as Pilot of an F-16.

Flight sim specialists Digital Integration will shortly be giving you that opportunity with *F-16 Combat Pilot*. It's a traditional wire-frame world that you see through the cockpit. It's very fast, though, and features all the latest abbreviated military terms like HUD and MFD.

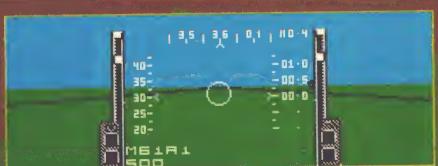
The sim features lots of missions, plenty of enemy planes to engage, and targets to destroy. All in all, it sounds like good fun, as well as being a serious simulation.

Win an F-16 combat fighter of your very own!

Now's your chance to win your very own fighter plane, by simply entering our super-duper compo! At 20 or 30 million US dollars each, it's some prize! And DI must be spending millions, 'cos there's not one, but 25 lucky would-be winners somewhere out



● Aaarrgh! It's worse than Blackpool's big dipper, this! Prepare to die, scum! (Er, that's us, not the enemy.)



● Sitting in the cockpit of your F-16 Fighting Falcon. I wonder what the big red button does? Only one way to find out...

1. What does the 'F' in F-16 stand for?

- (a) Flying
- (b) Fighter
- (c) Friendly

2. What keeps an aeroplane up in the air (bit of a technical question, this one)?

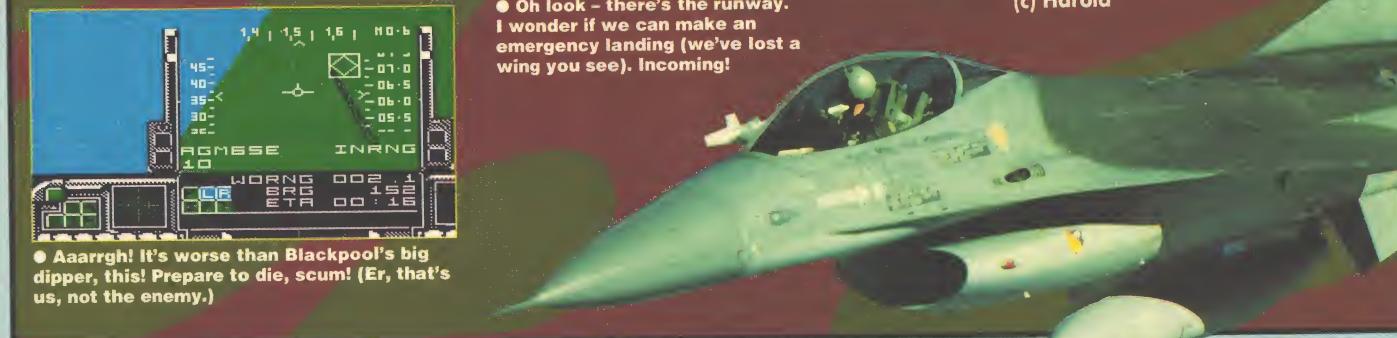
- (a) Wings
- (b) String
- (c) Luck

3. What do you call a person who flies an aeroplane armed with a 30mm cannon and sidewinder missiles?

- (a) Sir
- (b) A pilot
- (c) Harold



● Oh look – there's the runway. I wonder if we can make an emergency landing (we've lost a wing you see). Incoming!



● Aaarrgh! It's worse than Blackpool's big dipper, this! Prepare to die, scum! (Er, that's us, not the enemy.)

JUDGE DREDD

Freeze, punk! The man who makes Robocop look like a weed is due to make his way onto your Amstrad's screen. So you'd better be on your best behaviour, hadn't you...?

Mr Dredd will be brandishing his own style of justice under your control. It's up to you to keep down the crime rate with Lawgiver, your gun and best friend.

All we've seen so far are these screenshots, but when we've had the finished game in for review, we'll give it our full – and instant – judgement.



● Judge Dredd, the man with all the diplomacy of a breeze block, rides around on his motorbike and kills people.

tape or disk machine.

All you have to do is answer these three gun-related questions...

1. Who said: "Is that a gun in your pocket or are you just pleased to see me?"

- (a) Mae West
- (b) Clint Eastwood
- (c) Roy North

2. How many bullets fit in a six-shooter?

- (a) Five
- (b) Six
- (c) Seven

3. Finish the name of this film: For a few dollars...

- (a) Less
- (b) Either way
- (c) More

MEGA PHOENIX

They don't make 'em like they used to... Well, that's where you're wrong, actually! Dinamic, master of the shoot-em-up, is working on an up to date version of that old classic *Phoenix*.

Called *Mega Phoenix*, it will feature those feathered fiends on a renewed onslaught against your home planet – and they're not after your packets of Trill. This time they're better equipped than ever before. But then again, so are you. So there's no need to get in a flap. If you happen to have a friend in the same room (and a spare joystick), then you can cook their goose together.



● Bam! Bam! Whee! Crash! Relive those nostalgic days of *Phoenix* blasting. Dinamic has brought the classic into the Nineties. Yip!

FREE GAMES!



● Games for now! Buy one and get one completely free. (Apart from the p&p of course...)

There's an old saying that there's no such thing as getting something for nothing...

But buy one of the new range of Kixx games and you'll be entitled to another game, free! Kixx games are selling at a new, improved price of £3.99. Inside the packaging there's a card. Simply tick the game of your choice (from the 22 listed), send it to US Gold, together with a cheque or postal order for 99p and you'll receive your extra game absolutely free...!

Hmm. Maybe we were right in the first place...

TURRICAN II

The laser-weilding metal-man is back! *Turrican*, the superb shoot-em-up of last year, has sprouted a sequel! We've seen an early demo version of the game, but if it's anything as good as its (Mastergame-awarded) predecessor, then it'll be something to look out for.

Turrican II promises to have even more levels to trek through, and an even greater array of weapons with which to decimate the enemy.



● Eat laser fire, alien dudes! Mr. Turrican must destroy anything nasty, slimy, or with too many legs.

CHARTS!

FULL-PRICE

		NEW ENTRY	NO CHANGE	GOING UP	GOING DOWN	
1	Teenage Mutant Hero Turtles Mirrorsoft		AA65 76%	1		
2	Dizzy Collection Codemasters		Not reviewed	2		
3	Big Box Beau Jolly		Not reviewed	16		
4	Golden Axe Virgin		AA66 75%	7		
5	Kick Off 2 Anco	WE LIKE IT!	AA63 86%	5		
6	Hollywood Collection Ocean	WE LIKE IT!	AA67 83%	3		
7	Multi-Player Soccer Manager D&H Games		AA61 65%	-		
8	Gremlins 2 Elite		Not reviewed	11		
9	Total Recall Ocean		Not reviewed	-		
10	Wheels of Fire US Gold	WE LIKE IT!	AA63 84%	12		

THE BUDGETS

1	After Burner Hit Squad	▲ -	6	Cavemania Atlantis	▲ -
2	Real Gbusters Hit Squad	▲ -	1	Defs of the Earth Hitec	▲ -
3	Double Dragon Mastertronic	▼ 1	8	Out Run Kixx	▲ -
4	Vigilante Kixx	▲ -	9	R-Type Hit Squad	▲ -
5	Operation Wolf Hit Squad	▼ 2	10	Targ Renegade Hit Squad	▼ 4

WHAT'S HAPPENING

Due to a slight technical glitch this month, we're only able to bring you the top ten full-price games. Don't worry, though - normal service will be resumed as soon as possible!

Nothing too drastic has happened in the full price zone this month, but the budget charts have really turned round. Codemasters has slumped after long months of success with the Quattro series. Instead, Ocean is piling in with its Hit Squad label. Watch this space...



Teenage Mutant Hero Turtles is still number one. Any bets on how long it's going to stay there?

This chart is compiled by Gallup Ltd.
© European Leisure Software Publishers Association Ltd. 1991

COMPETITION

CHIP'S CHALLENGE COMPO!

Chip's Challenge is the new arcade puzzler from US Gold, and WE LIKE IT. In fact, Adam gave it 86% on page 52. And to celebrate, AA and US Gold are giving away a colossal wad of prizes...

Chip is a nerd. Sad, but true. Also sad but true is the fact that he has fallen hopelessly in love with the gorgeous Melinda from the Bit Busters computer club.

The only way Chip can join the club - and also win the heart of Melinda - is by working his way through 144 levels in a search for some missing microchips. Each level is a maze of traps, monsters, puzzles and other assorted hazards, so Chip really has got his work cut out.

Chip's Challenge is an arcade action/puzzler of the highest calibre, guaranteed to have you tearing your hair out with frustration but always, always coming back for more...

THE RULES

- No employees of Future Publishing or US Gold can take part, even if they do send us £5 in a sealed brown envelope marked "private" by next Wednesday morning
- Only one entry per household - so no postcards from your Gran, two-year-old cousin or Uncle Bob
- The closing date is 30th April 1991. Any entries received after that date will be left mouldering a corner of the office for 200 years before being discovered by archaeologists and put in a museum

HOW TO ENTER

Easy. Just choose the right answers to the questions on this page, jot them down on a postcard and whack it off to the following address:

Chip's Compo
Amstrad Action
29 Monmouth Street
Bath, Avon BA1 2BW

- The 21 prizewinners will be picked out at random from the AA compo hat after the final closing date.

FIRST PRIZE

- Sony 202CD hi-fi system
- US Gold T-Shirt
- Poster

SECOND PRIZES (10)

- US Gold T-Shirt
- Poster

THIRD PRIZES (10)

- Poster

THE QUESTIONS

- Why does Chip want to join the Bit Busters?
 - Because he's interested in computing?
 - Because he's a galloping zombie?
 - Because he fancies Melinda something rotten...?
- Chip's Challenge first came out on the Atari Lynx. Is this:
 - A Japanese golf course?
 - A furry thing that snarls and bites?
 - A hand-held games machine?
- What's got 3-band Digital Tuning with 12 random pre-sets?
 - A 4x3x4 triple-bogied spigot-shunter no. 0001371b from Wakefield?
 - Madge Bishop?
 - The £400 hi-fi we're giving away his month?

Got that? OK, well get cracking! And don't forget to put your name and address on the postcard...

38

AMSTRAD ACTION April 1991

39

AMSTRAD ACTION

DATTEL ELECTRONICS

dktronics



64K AND 256K MEMORY EXPANSION

- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K. The 256K unit takes your 6128 to 320K!!
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio - see Ad.).
- Ideal for use with the CPM 2.2 etc.
- Bank switching done automatically by software (cassette 464 - disk 6128).

ONLY £49.99 64K FOR 464

ONLY £99.99

256K FOR 464 OR 6128 (PLEASE STATE WHICH)

THE RAM MUSIC MACHINE IS PROBABLY THE MOST EXCITING MUSIC ADD-ON AVAILABLE FOR ANY COMPUTER



- It's a full sound sampling system allowing any sound to be recorded digitally into the computer RAM. Once stored, the sound can be replayed at different pitches with many varying effects.

AMDRUM



Now you can turn your Amstrad into a real Digital Drum Machine.

- AmDrum from Cheetah Marketing is a superb plug in device that produces "real" drum sounds via its unique digital system.
- On screen menu driven drum kit makes composing drum sounds easy for anyone to do!
- Just plug the output into your Hi-Fi, cassette player, etc. and that's it - your Amstrad is a drum kit!!
- Comes complete with DrumKit Sound plus extra DrumKit and Kit Editor Program (worth £9.99) absolutely FREE!!

ONLY £14.99

ONLY £14.99 CASSETTE

OR £24.99 WITH SOFTWARE ON ROM - NOTHING TO LOAD 464 OR 6128 (PLEASE STATE WHICH)

NOW A TOTAL MOUSE/GRAFICS PACKAGE FOR YOUR AMSTRAD AT A TRULY UNBEATABLE PRICE!!



TAPE OR DISK FOR 464 OR 6128 (PLEASE STATE WHICH REQUIRED) N.B. 464 NEEDS DK'TRONICS 64K RAM PACK

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COMPLETE WITH

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FREE!
MOUSE MAT AND
MOUSE HOLDER
(WORTH £12.99)
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COMPLETE WITH MOUSE INTERFACE



- The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour.
- Simply plugs into Expansion/Joystick port.

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TOTAL PACKAGE
INCLUDES GENIUS MOUSE,
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STUDIO PLUS FREE MOUSE MAT
AND HOLDER



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- Made possible by Datel's unique colour printer driver - now you can have a hardcopy in up to 16 colours!!
- No more to buy - just plug in and print!!

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DTEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99
NORMALLY £327.98

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- If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately.

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WiN a Sharp Camcorder!



We like the TV show "You've been framed" so much, that we decided to give away a home video as a prize! Here it is, a Sharp Camcorder worth over £600 that you could win!!

Call 0898 101952

You could WiN our Awesome Foursome!

WiN a QUAD!



This is the Suzuki LT50J - known to its friends as the Quad! You could win this four-wheeled wonder, simply by entering our awesome competition on the number below!!

Call 0898 101955

WiN a Junior Porsche 911!



This brilliant car worth £4000 is an exact replica of a Porsche 911, except you can drive it!! It has everything you'd expect on a normal Porsche like gears, brakes and lights, plus an engine which can take you up to 35 mph! Call it now!!

Call 0898 101954

WiN a BIKE!



This Suzuki bike must be the coolest thing on 2 wheels!! It has a 50cc petrol engine and you can vary the top speed from 0 - 50 mph!! The bike can be ridden by anyone over the age of 5, and it could be you if you call it right now!!

Call 0898 101956

Calls cost 33p (cheap rate) and 44p (at all other times) per minute including VAT. For details of winners please send an SAE to:

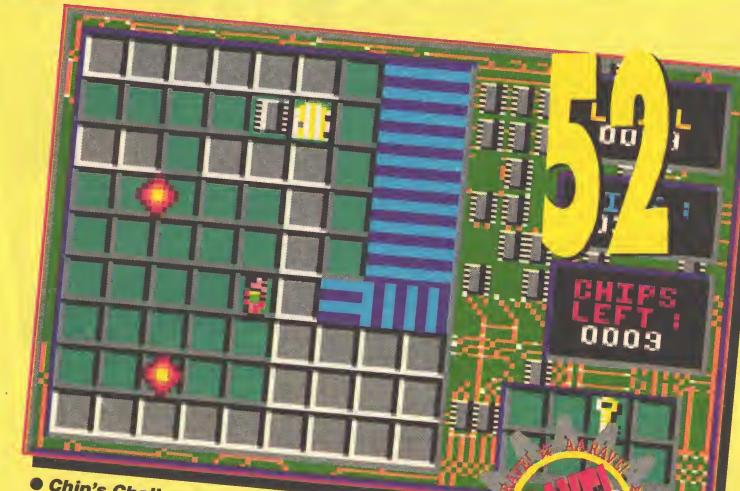
Pepperoni Winners, PO Box 1640, London. NW1 8NG Please ask your parents permission before you call.

Average length of the call is 5.5 minutes and we advise that you ring at cheap rate.

ACTION TEST



26 games in one issue? Amstrad Action goes compilation crazy...!



• Chip's Challenge - 144 puzzle-packed levels of chip-collecting mayhem. Can you win the lovely Melinda's heart?



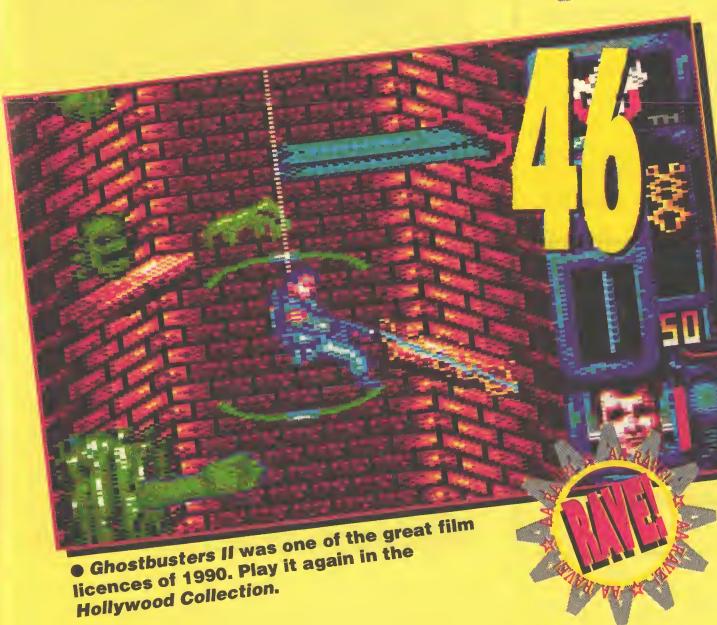
• Tetris with spaghetti... Pipe Mania going round in circles... what would you call it? Loopz has us hooked!



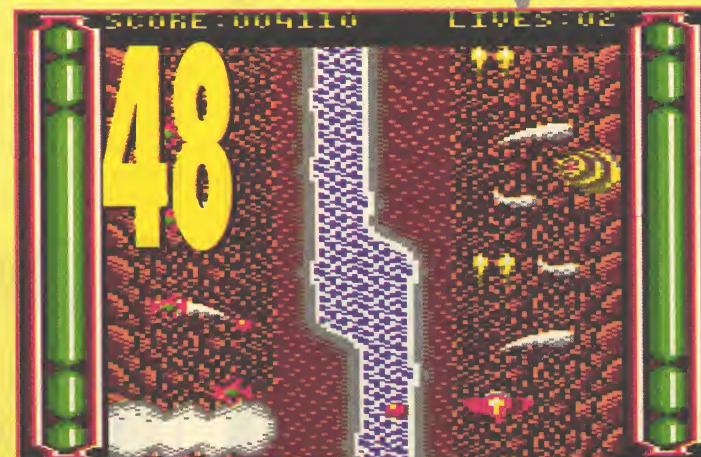
• Push your reflexes and joystick control to the limit with Digital Integration's Extreme.



• Ten classic oldies on one compilation? You'd better believe it - Gremlin's 10 Pack is one big release.



• Ghostbusters II was one of the great film licences of 1990. Play it again in the Hollywood Collection.



• Gemini Wing - one of four classic, tough shoot-em-ups in Edition One. Throw in Xenon, Silkworm and Double Dragon and you've really got your work cut out.

ACTION TEST

ICE

GREMLIN ■ Cass
£12.99 disk £17.99

These games are a varied bunch, both in quality and style, and every type of gameplay bar adventuring is provided. You can't complain at the value! Most are good, if not excellent, and this compilation represents extraordinarily good value. Shame about the odd couple of turkeys, but you can live with that, can't you?

Butcher Hill

Butcher Hill will appeal to 'Nam fans. There are three sections, the first of which is a Pole Position-type race, only you drive an inflatable dinghy down a river, as opposed to a formula 1 racer. You can blow up incoming planes and obstacles, but the aim is to collect vital equipment for the next two sections. You can land at any of three jetties, and from here on the action is shoot-em-up frenzy.

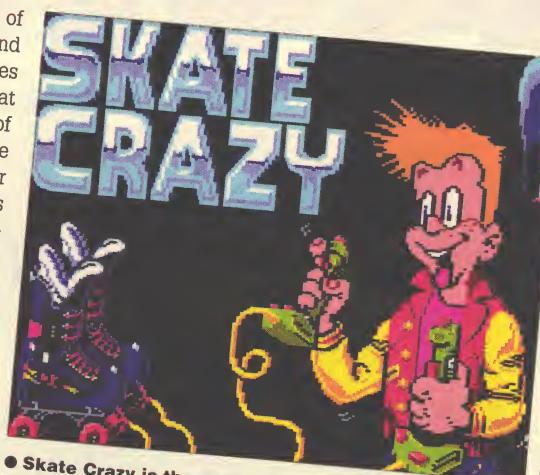
The game as a whole is not terribly well executed. The graphics are colourful, but very jerky, and the limited appeal of each section makes this look more like a budget title.



Leaping over an outcrop of rocks, you spot an incoming fighter plane... even for case-hardened 'Nam vets it looks bad...

Skate Crazy

Viewed from above, this is a kind of obstacle course on roller skates, and very tricky it is too. Your skater glides along with grace and poise - or at least he does once you get the hang of the controls. Simple obstacles, like traffic cones and tyres, hinder your progress, and there is scope for bonus points by performing various manouevres, such as jumping over ramps, carrying out somersaults and twisting in mid-air. All very difficult, but practice reaps its own rewards, and once you get the hang of it, this game is really quite neat. Graphics are nice and colourful, and sound too is well catered for. A bonus is the second part, this time a horizontal scroller along the same lines.



• Skate Crazy is the perfect tonic for micro-owning skate freaks. (While they're waiting for the plaster to come off, anyway.)

Road Runner

Based on the Atari coin-op of the same name, Road Runner follows the insane antics of Wile. E. Coyote, and his nemesis the Road Runner. The original arcade machine followed the basic structure of the cartoon very well, and this conversion does pretty well too.

In the cartoon, as most of you will remember, Wile. E. tried every way he could to bring the Road Runner's time on earth to an untimely end. Most of the equipment he uses comes from the infamous ACME booby trap and household goods retail corporation.

The game is a simple race. You have to avoid Wile. E., fill your face full of seed, and make sure you don't run into any of the fiendish traps he has laid for you. Nice graphics on this horizontal scroller, and playing the game is total laff-o-rama. If you liked the car-



• Ack! It's Wile. E. Coyote on an Acme rocket, can Road Runner outwit him? (Can a frog swim?)

Dark Fusion

Shooty, bumpy, jumpy time! Space, where no-one can hear you boing. Move your space hero through three levels of platform-cum-shoot-em-up action, collect various weapons, and visit photon death upon any hapless alien foolish enough to mess with your happy thoughts. A bit dull, but the graphics are nice, and sonics reasonable. Good fun in the short term, but nothing much to keep you coming back for more.



Eeeep!! Surrounded, and the only power-up Spaceman Spiff has at his disposal is a pair of bouncy shoes.

H.A.T.E.

H.A.T.E. stands for Hostile All-Terrain Encounter, and is viewed in isometric 3D - it looks and plays a little like the old Sega

One of the game's novel features is the choice of vehicles you can use - either a space fighter or a stonking great tank - swapping over at the end of each level gives this game an added thrill. Not too bad at all.

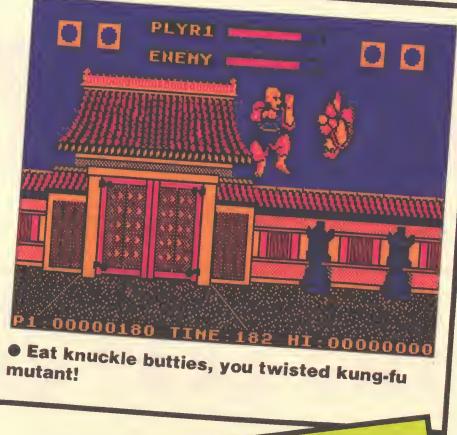


• Prepare to die, filthy alien scum! Shoot first, ask questions later.

Street Fighter

Ryu is the name of the Street Fighter in this game, the object of which is to travel round the globe and kick seven shades of sunlight out of any fool who challenges you. There are five countries to visit, and two representatives in each country.

Converted from the Capcom coin-op, this game loses the thrill of the big rubber pressure-sensitive pads that gave its arcade parent such a big name. Basically it's a one-on-one beat-em-up with reasonable graphics and sound, and decidedly dodgy gameplay.



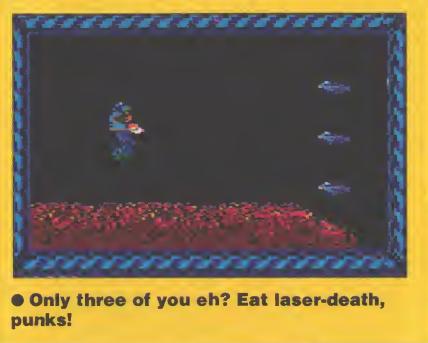
• Eat knuckle butties, you twisted kung-fu mutant!

ACTION TEST

Side Arms

Kill, maim, destroy!! Fly your jet-packin' hero into deepest darkest space, and if anything moves when you get there, open up with a volley of incredible photon death. Collect the very numerous power-ups, and turn yourself into the most awesome destructive force this side of the universe.

There's horizontal and vertical scrolling in this blaster, end-of-level guardians-a-plenty, lovely colourful graphics, reasonable sounds, and more extra weapons than you can shake a plutonium death ray at. Turn off your brain, switch on your autofire and teach those twisted alien space frogs a thing or two about laser death. A good blast, but nothing special. Works well on the Amstrad.

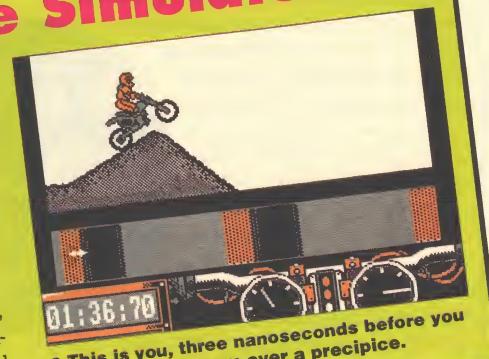


• Only three of you eh? Eat laser-death, punks!

Super Scramble Simulator

Vroom, Vroom!! A bit of a confession, this one. Way back in issue 47, we gave this game a proper slagging. However in view of the fact that it is now part of a compilation, and that we have had months to get used to the outrageously tricky control method, we have been forced to eat our words. This is really quite spiffy, and once you get used to the gears and stuff, it becomes very addictive indeed.

Scrolling sideways across rough terrain, your nicely-animated motorbike must negotiate any obstacles in its path. Good invoved fun, and long term appeal.



• This is you, three nanoseconds before you plunge to your doom over a precipice.

Footballer Of The Year 2

Standard football management laffs in this one, and if football management is your "action," it does have the novel added feature of a screen which allows you to gamble any funds or resources that you presently have at your command. The computer will ask you questions - basically football trivia - which, if answered correctly, will double your allotted stake. Simply progress through the season as a striker, working as part of a team, and basically being a cool hombre. Strictly for fans of the genre - other people may find this terminally boring...

STATE OF AFFAIRS		20									
1	2	3	4	5	6	7	8	9	10	11	12
GOALS SCORED THIS SEASON	15	16	17	18	19	20	21	22	23	24	25
LEAGUE	0	0	0	0	0	0	0	0	0	0	0
UK CUP	0	0	0	0	0	0	0	0	0	0	0
GREMLIN CUP	0	0	0	0	0	0	0	0	0	0	0
PL	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0
POINTS	14	15	16	17	18	19	20	21	22	23	24
TEAMS MORALE IS	EXCELLENT	GOOD	OK	POOR							

• Thrill to the incredible graphics, swoon at the impressive rock soundtrack... I don't think.

VERDICT

H.A.T.E.	74%
SKATE CRAZY	78%
DARK FUSION	71%
SUPER SCRAMBLE SIMULATOR	73%
ROAD RUNNER	81%
SIDE ARMS	69%
STREET FIGHTER	54%
FOOTBALLER OF THE YEAR	68%
GARY LINEKER'S HOT SHOT	76%
BUTCHER HILL	63%

OVERALL RATING 89%



• Oh, no, foiled again by the uncanny skills of the opposition's goalie! Perhaps you should have aimed first.

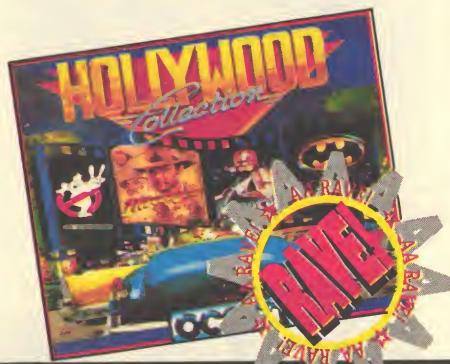
HOLLYWOOD COLLECTION

OCEAN ■ £14.99 cass, £19.99 disk

The tenuous link between the four games on this compilation is that all of them are based on their film counterparts.

The not-so-tenuous link between them is that they are all rather, rather good. This compilation is an absolute cracker and comes as a real treat, bearing in mind that most of the titles are very recent indeed. All of the games are excellent, and complement their respective movies beautifully. Outstanding value - buy it!

Frank O'Connor



INDIANA JONES AND THE LAST CRUSADE

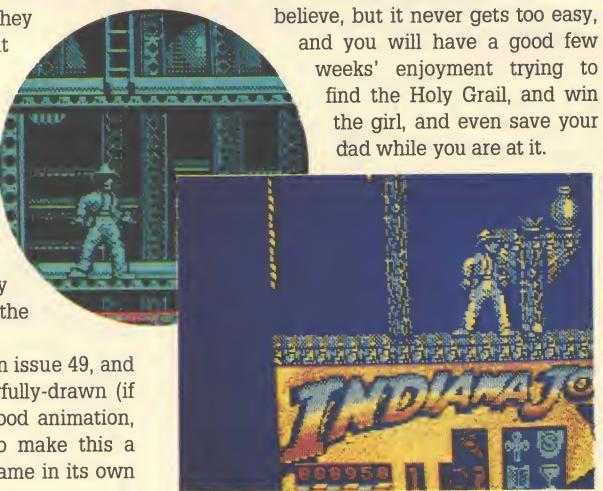
The man with the hat and the whip is back – he's brought his dad and a little brown sack. The Nazi scum are at it again, and it's Indy's task to sort them out. They want to find the Holy Grail, but Indy's dad sent the map in the mail. It fell into the clutches of a Nazi called Helga (...er... um, what rhymes with Helga?).

Anyway, in this epic you and Indy have to negotiate platform and ladder-type screens in the quest for the Holy Grail, and pretty much follow the plot of the film in the process.

AA gave this game a Rave in issue 49, and with good reason too. Wonderfully-drawn (if Speccy-port mono) graphics, good animation, and nice tunes all combine to make this a great film tie-in and a good game in its own right.

A couple of minor gripes – the sprite collision detection is less than generous, and Indy

seems to mistime jumps, even when your reactions are spot-on. It is less of a challenge than first impressions may lead you to believe, but it never gets too easy, and you will have a good few weeks' enjoyment trying to find the Holy Grail, and win the girl, and even save your dad while you are at it.



Not a great deal happening here, but could there be something useful in that there pot? Indy decides to take a look...

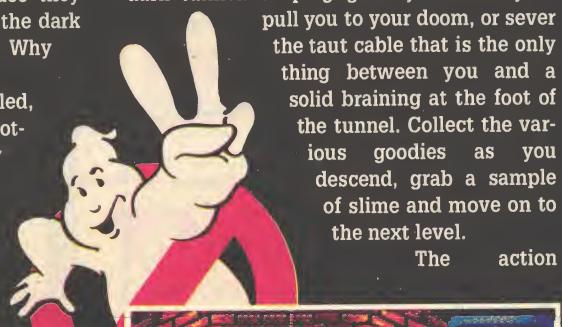
ROBOCOP

continues inside the Statue of Liberty, which you have to guide (it walks, seriously) along Broadway, avoiding contact with ghosts as you go. You must replenish your ever-depleting supply of lubricating slime, or face the dire consequences.

Should you complete the second section, you are faced with the third and final level. More rope-swinging this time, as you attempt to save Sigourney Weaver's sprog from the dastardly clutches of Vigo the Carpathian (made-up name).

Nice graphics, cool sounds, and spot-on gameplay, marred on the cassette version by a cumbersome multi-load. Recommended nonetheless.

The action



Ha! A valiant Ghostbuster reaches his destination at the foot of the air shaft. Spooks-a-plenty though to make life difficult.



The Statue of Liberty takes a leisurely stroll along Broadway – not bad for a 200 blinkin' foot stone statue...



BATMAN - THE MOVIE

A dark shape stands silhouetted against the full moon. Atop the highest building in Gotham City, he pauses a moment, and then leaps from his perch, cape billowing in the night breeze. He swoops, and reaches for an outstretched flagpole, grasps it, flips over, and hangs there for a while, almost like a bat...

Yup! Beginning in the platform-filled realm



The Caped Crusader swings gracefully through the Axis chemical plant, ever closer to his appointment with the Joker.

of the Axis chemical plant, the scenario of the first section is more than a little like the Capcom arcade hit *Bionic Commandos*. The caped crusader swings deftly from ledge to ledge, dealing out swift and brutal justice to crims with the aid of a well-placed Batarang. Moving on, you encounter the nasty, despicable killer of your parents, Jack Napier. Knock him into a vat of radioactive sludge, and move on to the next stage.

Here, you tear through the streets of Gotham City in the souped-up Batmobile, using a well-timed batrope to aid you as you speed round tight corners...

After all that excitement, it's time to relax with a reasonably sedate puzzle game, in which you try to come up with a cure for the Joker's fiendish laughing gas.

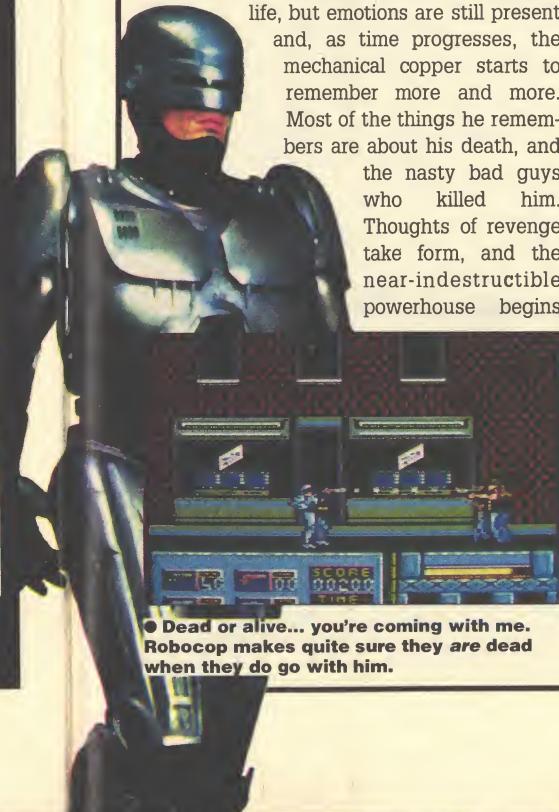
Then you race from here to the Batwing, and stop the gas-filled balloons from delivering their hysterical, but deadly, payload of laughing gas. Back once more in the violent streets of Gotham, your final task is to scale the

heights of Gotham Cathedral (more platform fun), and reach the final showdown with the cackling loon himself.

Flawless in both design and execution, the excellent graphics and decent music mean that finishing the whole game will be a long but enjoyable job. Brilliant, and quite unbelievable as part of a compilation.



Vroom! Vroom! The Batmobile screams through the busy streets of Gotham to the final showdown with the grinning goon.



ROBOCOP

Alex Murphy, unfortunate victim of a crime wave in Detroit, is blown apart by a vicious crim. He wakes to find that the remaining bits of his body have been rudely transplanted into a robotic exoskeleton. Murphy can't remember diddley-squat about his previous life, but emotions are still present and, as time progresses, the mechanical copper starts to remember more and more.

Most of the things he remembers are about his death, and the nasty bad guys who killed him. Thoughts of revenge take form, and the near-indestructible powerhouse begins



Dead or alive... you're coming with me. RoboCop makes quite sure they are dead when they do go with him.

his quest to track down his own killers.

The game is a shoot-em-up of sorts, where you stalk the streets of old Detroit, blasting the assorted criminals using a varied selection of firepower ranging from fists to demolition cranes. Power-ups are available, including a very impressive assault cannon, capable of quite stupendous feats of destruction.

The action is interrupted at regular intervals with a chance to calibrate your sights on a firing range, with your targets being actual felons rather than clay pigeons. And there's a subject identification section, much like those old-fashioned sliding puzzles.

Graphics and sound are reasonable, and the product has a very slick and polished feel to it. Possibly the weakest of the bunch, but still an excellent game.



Dead or alive... you're coming with me. RoboCop makes quite sure they are dead when they do go with him.

Verdict

INDIANA JONES and the last crusade	82%
ROBOPOLIS	91%
BATMAN-The movie	89%
ROBOCOP	81%

OVERALL RATING

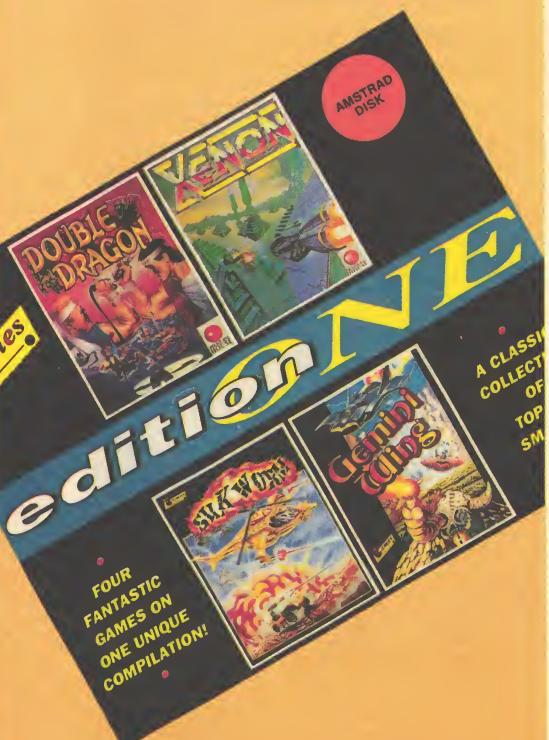
83%

EDITION ONE

VIRGIN GAMES ■
£12.99 cass,
£14.99 disk

The link between these four games is a pretty simple one – mindless violence and destruction! The compilation as a whole isn't too bad, but only two of the games are outstanding, and one, Xenon, isn't far short of dire. The underlying sentiment of remorseless mindless violence is admirable, though. Not bad.

Frank O'Connor



Xenon

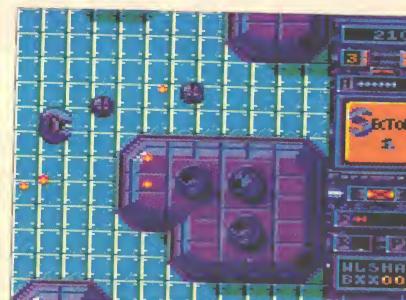
Xenon was a smash hit on the 16-bit machines, and was the first title to really show off the capabilities of the (then) new machines. The Bitmap Brothers were the wild hombres responsible for the game, and it takes the form of a vertical scroller with one big difference – you can swap vehicles at the press of a button.

Switching between a tank and a space-craft, you simply fly or drive up the screen, destroying anything you come across. Kill, maim, eradicate... we've seen it all before, and for it to work, it needs to be done with either originality or extreme style. The question is, does the Amstrad version fall into either of those categories? Sadly, no.

The graphics are quite bland, and the scrolling is painfully slow. Sprites are not bad, but lack both colour and character. The control response is poor, bordering on dreadful, and the game lacks the essential drive of this genre. Sound isn't too bad, but in terms of playability, this title, unfortunately, is a bit on the rough side.

The real problem, is that converting a game which relied heavily on awesome graphics and sound even on the 16-bit machines, is really a bit foolish. The poor old 8-bit Amstrad just isn't up to the job.

The original ST and Amiga versions were beautiful to look at, but actually quite dull to play.



• Trundle slowly across the landscape and maim, kill or torture all the little guys with pathetic weapons. Oh, and stay awake.



• Gaah! An alien mothership pursues you across the metallic landscape, does she want to kiss you? No she does not.

Xenon is also very easy to complete. The aliens are the only thing that move slower than you, and their bullets bumble about aimlessly, very easy to spot, and even easier to avoid. Too easy, too dull, and lacking in both variety and originality.

Double Dragon

You're strolling casually down the street, with your best girl on your arm. The sun is shining, the birds are singing and then, all of a sudden, you are surrounded. The swarthiest gang of cut-throat, razor-weilding thugs in the city decide that they fancy your bird. Wham! The filthy scum bop her in the stomach, and drag your squeeze off to their lair.

Understandably miffed, you and your pal pull on your special kung-fu trousers, and head off into the darkest depths of the city's underworld.

What follows is a kicking, punching, head-butting, stabbing, clubbing, shooting bloodbath of extreme violence. Hit anyone who strays across your path... thugs, drug-dealers, little old ladies, it's all the same.

Graphics are very nice, and echo the feel of the arcade original quite nicely. Sound is little more than average, though, but the biffs and pows are quite suited to the game. In terms of playability, beat-em-up fans couldn't ask for more, with plenty of vicious baddies to deal with and the added bonus of being able to use any weapon that the enemy drop. Knocking sense into particularly big dudes with a baseball bat is a pleasure that should be experienced by everyone, and normally



• A thug blots out the sun as he leaps toward you... kill him, kill them all, ha, ha, ha! (Frank is a very sick man - Ed)

Gemini Wing



• Those fluffy white clouds conceal some of the most vicious, twisted alien space fiends in the history of galactic warfare.



• Flying low over the valley, you unleash a volley of laser death on the approaching aliens. Charles Darwin you ain't.

Now there is really nothing better than jumping into a spaceship and murdering unpleasant, slimy, aliens is there? Especially when they are as ugly as this lot. What do you need to visit destruction upon these hapless alien scum? Extra weapons, that's what. Not just ordinary weapons either – how about "The Windscreen Wiper of Death"? Or perhaps "The Spiralling Circle of Death"?

Unashamedly xenophobic, this simple vertical shoot-em-up has you flying over an alien

landscape killing absolutely everything. Weapons are gained by collecting the pods that dead aliens leave behind, usual end-of-level guardians make an appearance, and what we have here is a standard arcade conversion.

The graphics are not really bad, but very garish, and it is often quite hard to tell just what exactly is going on. Enemy bullets are hard to spot, and the end-of-level critters are very dangerous indeed. Fortunately, smart bomb-type weapons make a frequent appear-

ance, and boy, will you need them.

Possibly a little too difficult for the novice player, but not impossible, and certainly hardened blasters will find this one just the challenge to see them through the long nights.

We gave this one a Rave when it first came out, but in retrospect, and bearing in mind the standard of current software, this doesn't really stand up too well. Still, fans of the coin-op original will be very happy with this conversion.

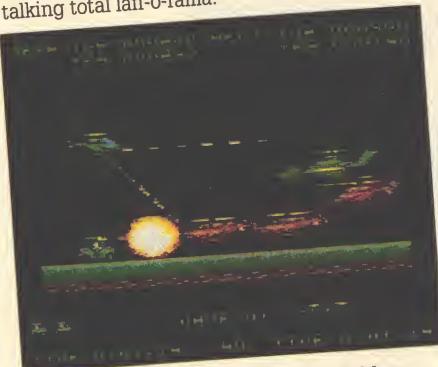
Silkworm

Two-player mayhem is the order of the day in this conversion of the excellent Tecno coin-op. A novel feature of this game is that, when in two-player mode, each player controls an entirely different vehicle, one a jeep, the other a helicopter. Both are armed to the teeth, and extremely dangerous.

The action scrolls horizontally across a war-torn landscape, the chopper controlling the skies, and the jeep taking care of any land-bound obstacles. Extra weapons can be picked up at various stages, with the jeep having to perform an improbable jump to reach them.

The helicopter is controlled in much the way you might expect, and the jeep has a machine gun which can be rotated through 180 degrees. A push up on the stick, and the jeep leaps gracefully through the air. Teamwork is very important in this game, and it is teamwork which makes this stand out from the crowd. You will alternatively curse and praise the efforts of your teammate, and no advantage is gained through being selfish.

The graphics are superb, and really capture the feel of the arcade version. Sound is noisy and raucous, and suits the game to a tee. All in all, this is more fun than a guy should have, and is easily the best game on the compilation.



• Budda, budda, budda... blam, ker-blam, ka-pow... destroy, maim, eradicate, eat lead, die, etc...



• The jeep and copter team up to waste the big mid-level guardian, destroy him and collect the power-ups he leaves behind.

Verdict

XENON	64%
DOUBLE DRAGON	85%
GEMINI WING	65%
SILKWORM	89%

OVERALL RATING 73%

ACTION TEST



• An encounter with a supernatural goon spells trouble for Boone, should he turn back?



• Boone, now transformed into Cabal dispatches a poor unfortunate soldier boy.



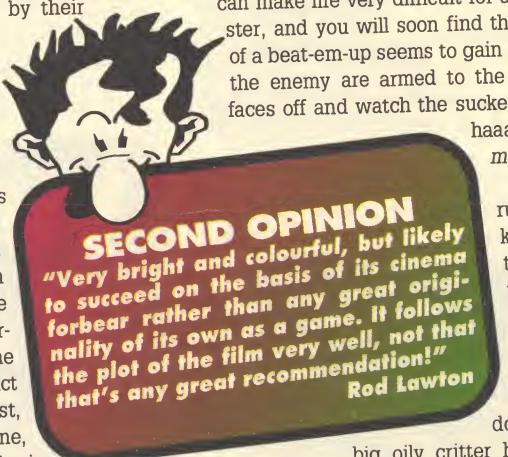
• Boone takes on someone a lot bigger than himself, cos he is righteously hard dude.

NIGHTBREED

OCEAN ■ £10.99 cass, £15.99 disk

Midian... a place where even monsters can find forgiveness. A place where grotesque creatures, shunned by humanity, have fled to find some kind of refuge. Some are evil, some are simply misunderstood, but all of these vile creatures have one thing in common - they realise that true evil exists only in human souls, and that monsters, like animals, are innocent of their crimes by their very nature...

And so in this game, based upon the book and film by Clive Barker, the enemies are the "good" guys. Soldiers from the Canadian (for that is where the film is set) equivalent of the National Guard seek to hunt down a man named Aaron Boone (the hero), and make him pay for a series of murders they believe he committed. Boone is in fact innocent, but his psychiatrist, Decker, has hypnotised Boone, and made him believe that he is guilty. Torn with anguish, he makes his way to Midian, where the unfortunate dude gets bitten by a sort of vampire thing. From bad to worse, as they say. Boone does not snuff it, but instead comes back in the form of a beast thing called Cabal (after a meeting with a naked demi-god called Baphomet), and decides to wreak vengeance on Decker.



SECOND OPINION
"Very bright and colourful, but likely to succeed on the basis of its cinema forbear rather than any great originality of its own as a game. It follows the plot of the film very well, not that that's any great recommendation!"
Rod Lawton

big oily critter himself, and gain the power of Cabal. Once transformed you become rock hard and dangerous to know.

Transformation is essential if you are to beat your arch-enemy Decker, who you will meet in the final showdown at the end of the game. Decker is a nasty piece of work, and is more than capable of taking off your head with a well-aimed swipe of his chopper, and so more than a



• Stuck between a really big monster and an enormous rock, Boone is not having a very good day. The monsters are best avoided, and should only be tangled with as a last resort.



• The monster is one of your mates, but who is the blue chick in the cofin? Best escape route is probably up the ladder, but getting past the green goon is a hassle.

little caution is required. The graphics are very well done, colourful and very atmospheric, really adding to the gameplay. Sound is reasonably good, with a creepy opening theme, and spooky sound effects throughout.

The gameplay, however, is not quite what it should be. What there is is really very good, but for this type of exploration-based

arcade adventure, the average punter requires more than a little variation, and this game is very "samey" all the way through to the end.

On the plus side, it does play smoothly, and progress is simple, and easy to make. The game follows the plot of the film reasonably accurately. All in all a reasonable game, and a must for fans of the movie.

Frank O'Connor

FIRST DAY TARGET SCORE

Find the keys

NIGHTBREED VERDICT

GRAPHICS..... 81%
Smooth and colourful, with nice animation and varied creatures.

SONICS..... 76%
A nice tune to start with, and good to average spot effects throughout.

GRAB FACTOR..... 80%
Easy to pick up, and progress comes very quickly and easily

STAYING POWER... 72%
A little too easy for long-term enjoyment, and little in the way of variety.

RATING 78%
A very reasonable game in its own right, and a good tie-in.

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• What a lot you're carrying! The skates allow you to walk on ice, the magnet on conveyor belts, the red badge through fire, and the blue through water.



• You have unlimited lives in which to complete the puzzles. This time, however, it's been done first time. Hooray!



• This is the final level, with lots of fire and monsters. Bet you can't get this far! (We only did 'cos US Gold told us the password.)



• The eight training levels teach you how to play. Walking over a question mark icon gives vital tips about the things you'll find.

ON THE LEVEL

Levels one through eight are training levels. They are fairly simple in construction, and are designed to gently ease you into the game. Each shows a different aspect of the puzzles you're likely to encounter when you get into the game proper. Level one has four different-coloured keys, and a corresponding number of doors. To solve it you simply unlock the doors, grab the chips, and get to the flashing blue square above the centre.



US GOLD ■ £10.99 cass, £15.99 disk

Chip is a nerd. He's a gangly bespectacled youth, and has no chance with Melinda, the best looking girl in the class. But if he can prove himself... if he can complete the challenge... then maybe people will see him in a different light...

Melinda has told Chip that he can join her computer club – the Bit Busters – on one condition: first he must make his way through 144 tortuous levels on a hunt for missing microchips; that's *Chip's Challenge*.

It's a bit tight, really, 'cos the levels are infested with marauding monsters, terrible traps and dozens of dangers. But Chip fancies her like mad, so he's up for the task.

Chip has to collect a number of silicon chips that have been scattered around each level, then find the portal to escape to the next one. It isn't as easy as it sounds, though. The game world is constructed from a variety of blocks, doors and surfaces. Chip has to learn how to interact with all these, and figure out the puzzles.



SECOND OPINION
Having played this first on Atari's Lynx handheld, I was more than pleased to see that most of the levels and features of this excellent puzzle had been transferred to the CPC version, even if the graphics are a little confusing at times. **Frank O'Connor**

Normally, the floors are made up from metallic tiles. However, it could be that you have to negotiate ice (causing you to slip), conveyor belts that propel you along with little control of your destiny, or worse.

There are plenty of objects to help you out on your journey, though. A pair of cleats will let you walk across the ice without slipping uncontrollably. And a fire suit allows flames to be walked through without harm.

Other things that help you on your way include keys to get through the colour-coded doors, and blocks which can be pushed around to form bridges, or which may be hiding yet more useful collectables. All these components are laid out in such a way to produce a huge variety of puzzles that'll make your brains explode. (Yuk! – ed.)

There are a few features that are missing here that you'd expect to find in more conventional games. They make sense, too. There's no score, for a start, and who needs one? The game is played to get further and further through the levels, not to tot up points. And the usual lives counter is missing. If you get killed, you simply start again. You can replay the same level over and over again until

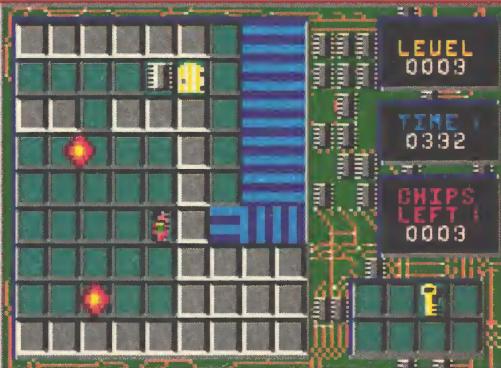
CHIP'S TIPS

Each of the 144 levels that make up *Chip's Challenge* has plenty of problems, predicaments, puzzles, posers, pickles and other things beginning with 'p' to torment, tease, trouble, torture, test... (For heaven's sake, get on with it! – ed)

You'll have to work out the way to solve each level individually. However, there are general hints and tips that can be applied throughout the game...

• A password is given for each level. Make sure that you make a note of each one, or you'll find that you're re-playing levels that you've already completed!

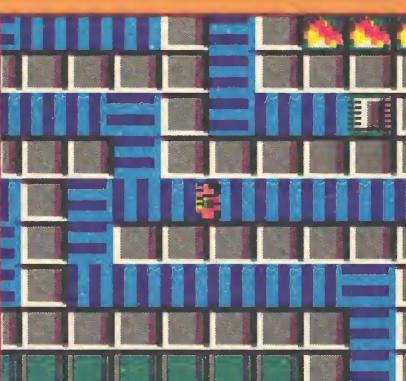
- Look under blocks. There can sometimes be things underneath them. Careful, though – sometimes there are nasty things hidden there!
- Move blocks carefully. It's all too easy to push them into a corner, where they get stuck!
- If a level is particularly difficult, make a map! Obviously you don't want to make one for every single level – there are far too many for that. But it will make the world of difference to really troublesome screens.
- Timing can be crucial on some levels, but it's equally important that you think about what you're going to do to solve it. Use the pause key to give you time to think!
- Monsters usually move in predictable patterns. Some will follow the walls or patrol back and forth in a straight line, while others try to move directly towards you. Use their stupidity to your advantage!



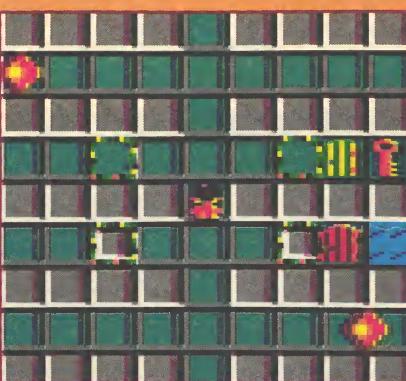
• Some levels have a time limit, others don't. On most a number of chips need collecting, but on some there are none at all. Pretty zany, eh?



• Step onto the ice, and you slip along helplessly. In this puzzle you have to get the chip, but watch you don't slip into the fire.



• Whewee! Those conveyor belts belt you along like greased lightning. You're out of control, so sit back and enjoy the ride.



• Those barriers are turn off-and-on-able. A switch elsewhere allows you to toggle them and let you pass.

FIRST DAY TARGET SCORE

Reach Level 20

CHIP'S CHALLENGE VERDICT

GRAPHICS 67%

Colourful, but small and blocky graphics that move slowly.

SONICS 77%

A large variety of spot fx, and suitably irritating tune.

GRAB FACTOR 99%

The 'learner levels' get you into the game painlessly.

STAYING POWER... 84%

144 tough and challenging levels will keep you going for ages.

RATING 86%

Classic puzzle action that oozes with gameplay.



EXTREME METAMORPHOSIS

LEVEL 1:

There's a right way to go about every job, and it's important that you're properly equipped for the task in hand. The right clothing is essential, and after all, it's for your protection (safety goggles on, kids!).



It's a two-piece combination suit for the first of Extreme's levels. The jet pack lets you fly to those otherwise unreachable areas. Those caterpillars make this one a real track-suit (Ho! Ho!).

LEVEL 2:

It's into the briny for the second level, and so you're appropriately kitted out for the plunge. This divers style suit is just the thing for getting away from those man eating fishes. It's mine-proof too!



LEVEL 3:

You can move around quickly enough on these Giraffe-sized legs in level three. They don't exactly make you a small target though.



• You're issued with a plasma gun on Level Three. This weapon shoots streams of multi-coloured death at your adversaries.



• Pick on someone your own size. The tank that is met in Level Three is a bit of a tough customer compared to the other baddies.

EXTREME

DIGITAL INTEGRATION ■ £9.99 cass, £12.99 disk

Having your legs ripped from your torso isn't at all appealing to most people. But then you're not most people, and if that's what it takes you're prepared to go to the extreme...

It's your mission to defeat... but no, really, it doesn't matter what your mission is dammit, there's killin' to be done, and you're just the half-man to do it.

The problem of having no legs is neatly solved by a selection of clip-on cyber-parts, adapted to suit the different situations you find yourself in.

The first of your tasks is to carry an energy sphere from one end of a spaceship, and plonk it into the correct receptacle at the other end. It seems that the best equipment to do this is a set of caterpillar tracks and matching jetpack (they always did go so well together).

It isn't going to be easy. There are seemingly impassable barriers, red-hot molten lava (why there's such a thing on a spaceship is a mystery), and plenty of energy-draining baddies that get in the way. To top it all, a strict time limit has to be complied with or your planet will be destroyed (yes, it would be, wouldn't it).

Manage to avert disaster and you'll find



• Bam! Take that in the gizzard, alien scum! A stab of the Fire button unleashes a burst of laser fire. Kills all known aliens dead.

back into fashion one day.)

The three levels are very different in game-play and look, despite being variations on the same theme. There are a few minor puzzles to work out in the first section of the game, and lots of aliens to kill! Your standard armament on

the first level is the flame torch. A quick stab of the Fire button will incinerate any nasty that should stray into your path.

Energy is lost if you're careless enough to collide, though.



• The opening sequence where you're told what's what. This is just before your limbs are so painfully removed.



• Ah, that's better! A relaxing dose from the space-ray boosts your energy levels to full and tops up your ammo to boot.



• The energy sphere is a slow-moving beast, which means that the aliens have plenty of time to bash you.



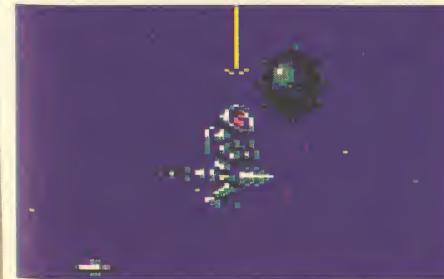
• Come back, Rover! That energy sphere has a mind of its own. It knows exactly where it's going, so you just have to keep up with it.

Luckily, both weapons and strength can be replenished by returning to the level's starting point.

The energy sphere (or whatever it is) is dragged along by means of a rope that extends from your body. It moves according to a predetermined path, and only when you can see it on screen. It also moves at an infuriatingly slow rate. So to get it to your destination you have to move at a snail's pace. This makes you vulnerable to attack from the space critters that infest the place.

An altogether different technique is required on Level Two; you've got to move fast to avoid the ferocious fish. Though the mines can be used to blow them out of the way, you'd be wise to conserve them for use on the way back to have any chance. It's a short level, just there and back again as fast as you can go, but a dangerous one. Hit a shoal of fish when there isn't a mine in sight and you've had it.

The big legs of the third level move you at a



• You're gently lowered into the start of Level Two. It may start off quietly enough, but wait 'till you get a screen load of piranhas!



• Arghhhh! Me ankle. They may be small, but they don't half bite. The only way to destroy these blighters is by head-butting a mine.

EXTREME VERDICT

GRAPHICS..... 93%
Large and colourful graphics that get better and better as you go along.

SONICS..... 70%
Fairly reasonable in-game fx, but no title tune.

GRAB FACTOR..... 88%
Amazing looking and easy to pickup. You can play straight away.

STAYING POWER... 79%
There's plenty of challenge, but some may find it tough.

RATING 84%
Technically excellent with great visuals, but a little frustrating perhaps.



• What big legs you've got... All the better to stomp them with! The impressively large main sprite that you become on level three



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ACTION TEST

Remember Tetris, that Russian puzzler that was all a load of blocks? (It certainly was on the Amstrad!) Welltris is the sequel – and it's four times as tough.

With Tetris the idea was to guide differently-shaped blocks onto a pile of the things at the bottom of the screen. Every time you formed a solid line with no spaces, that line disappeared, lowering the level of the pile. Of course, if you didn't form solid lines, the pile got higher so that you had less time to get the blocks into position, so that you had less time to form solid lines, so that the pile got higher and you had less time and... and... and when the pile reached the top of the screen it was game over and you were reaching for the tranquillisers.

Welltris adds another dimension to this sim-

ple picture of daily Russian life.

But there's more. While the blocks in Tetris were composed of four squares, those in Welltris can be composed of two, three, four or five! Welltris has three difficulty levels, and on the first the blocks are made up of two, three or four squares. On the second, they're made of four squares only and on the third it's two, three, four or five...

Control is by joystick, and there are two control methods to choose from. The first moves the blocks about strictly according to direction, so that on the bottom and top walls (as you look at the screen) you



• The well itself is graphically rather plain, but you do get some nice little pictures of everyday Russian life – a different one each time the speed notches up.

Welltris takes the simple geometric puzzling of Tetris and add a greater depth of gameplay. But Tetris's charm was its simplicity – Welltris is undeniably a 'bigger' game, but it's also more complex. However, although Tetris was great on other formats, on the Amstrad it was cr*p. So in that respect at least, Welltris is a huge improvement.

Rod Lawton

WELLTRIS

INFOGRAMES ■ £9.99 cass, £14.99 disk

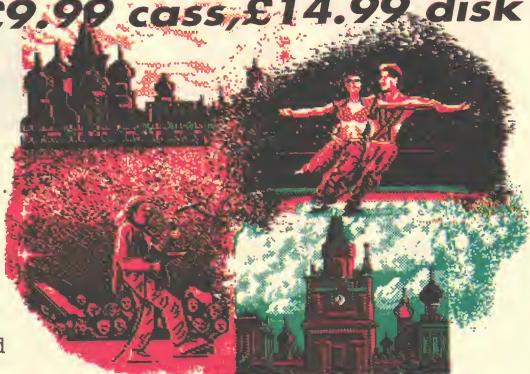
ple but fiendish gameplay – literally. Instead of just one 'wall' there are four, joining up to form a 'room' or 'well'. Now, the blocks slide down the wall and across the floor before coming to rest – and that makes a lot of difference...

Now you can move blocks around the walls to attack the pile in the middle from any angle. And you can rotate the falling blocks as before for even more brain-boiling, panic-stricken, joystick-wagging. And there are other itsy, witsy changes...

Firstly, your main object is to stop the floor filling up with blocks. As soon as one block overlaps a wall, that wall changes colour and is out of action until you've landed three more blocks. It's not the end of the world when you lose the use of a wall – it's when you lose more than one that things start getting interesting, especially if they're facing each other. Then, you're limited to the wall subsequent blocks appear on...

In practice, you lose the game when all four walls are put out of action. On the lower levels it's difficult to see how anyone could be this clumsy, but later on, as the blocks speed up and panic sets in, things get out of control very fast.

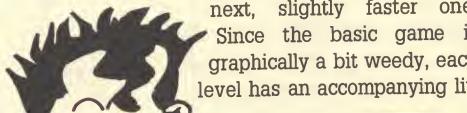
Just like the original Tetris, Welltris is broken down into a series of levels. You stay on each level until you've scored a certain number of points and then you move up to the next, slightly faster one. Since the basic game is graphically a bit weedy, each level has an accompanying lit-



should move the 'stick left and right, while for the side walls it's up and down. This is very, very confusing. The other control method makes much more intuitive sense – you just use left and right to move the block clockwise or anti-clockwise around the walls.

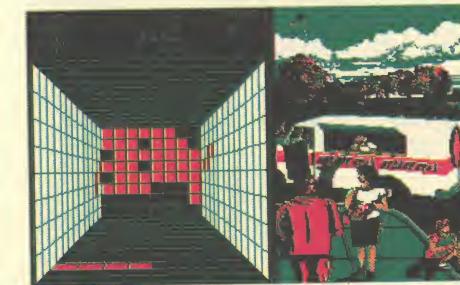
In both cases, pressing Fire rotates the block and pressing Space sends it sliding quickly to the floor (handy for speeding the game up during the easy early stages). Incidentally, once the block is on the floor, you have no control over it.

The graphics are all done in four-colour mode, but the game doesn't really suffer as a result – indeed, the screens are quite 'clean'. Sound is minimal, consisting of encouraging noises when you get a line to disappear and discouraging ones when you block off a wall. But this is a brain-teasing puzzle game, not a mindless arcade blast – what more do you need?

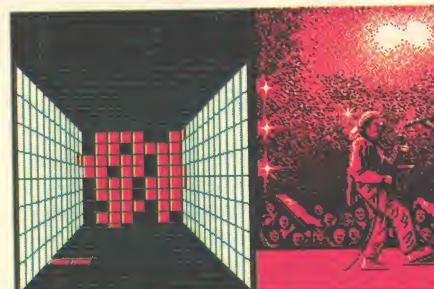


SECOND OPINION

"Tetris in 3D is even more of a challenge! Though it's slightly more complicated to play, it still retains the charm of the original, and should provide hours of fun for hours to come." Adam Waring



• Ouch – two walls out of action thanks to overlapping blocks. That's bad news – movement of subsequent blocks is now limited.



• Up to a speed of '4' on Level One. Things are starting to get just a little bit tricky, as your thinking time diminishes...

FIRST DAY TARGET SCORE

Survive Level Four

WELLTRIS VERDICT

GRAPHICS 72%

Only four colours, but 'clean' and perfectly adequate.

SONICS 50%

Not much sound, and what there is is simply functional.

GRAB FACTOR 85%

Very easy to pick up, and good fun as the panic sets in...

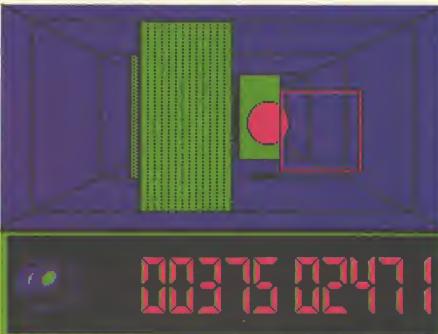
STAYING POWER ... 92%

The sort of game you can never really beat.

RATING 78%

Challenging, long-lasting, and addictive – but lacks the simple appeal of the original

ACTION TEST



• The further you get along *The Light Corridor*, the more difficult it becomes. Here moving walls patrol the corridor. Eek!

you beaten, there's precious little you can do about it but keep on slogging away...

Adam Waring

FIRST DAY TARGET SCORE

Reach Level 13

THE LIGHT CORRIDOR VERDICT

GRAPHICS 41%

Grab four colour graphics which don't look very 3D at all.

SONICS 80%

Nice title tune, and a good set of sounds.

GRAB FACTOR 88%

Very original game, and initially easy to progress.

STAYING POWER ... 72%

There are 50 levels, but will you last that long?

RATING 78%

An interesting game, but a little too limited to be a Rave.

INFOGRAMES ■ £9.99 cass, £14.99 disk

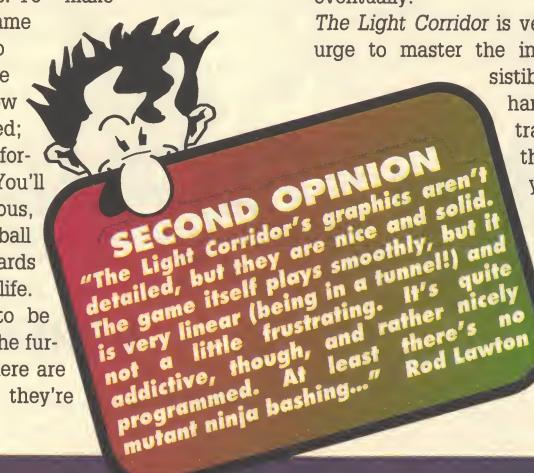
How bizarre! You've got to bounce your balls down a long straight corridor in an effort to reach the light at the end of the tunnel. (Told you it was an odd game.)

The Light Corridor is a cross between a sort of 3D Pong and the trench sequence from Star Wars. You have a bat with which to whack the ball down the corridor, and the ball will bounce from the walls, floor and ceiling.

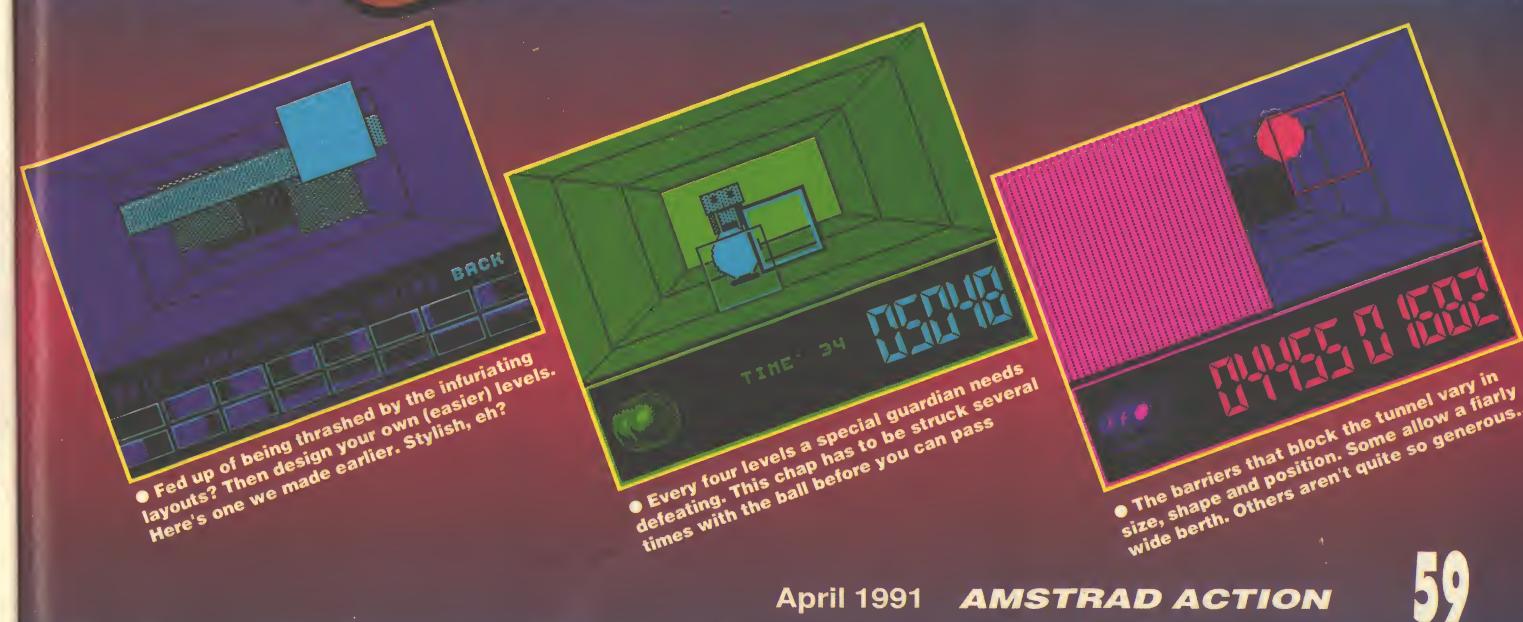
Sprinkled liberally along the passageways are barriers. These prevent your ball from bouncing straight from one end of the corridor to the other. Most of these are solid and un-moving, and you have to manipulate the ball so it bounces around the obstacles. Some move to and fro, adding a timing element to the task in hand, while others mimic your movements, making quick actions necessary in order to 'fool' the mobile obstructions. To make

progress in the game you'll have to advance along the corridor – this is how points are scored; one for each step forward taken. You'll have to be cautious, though – miss the ball as it comes towards you and you lose a life.

The ball has to be followed to reach the further levels, too. There are 50 in all, and they're



SECOND OPINION
"The Light Corridor's graphics aren't detailed, but they are nice and solid. The game itself plays smoothly, but it is very linear (being in a tunnel!) and not a little frustrating. It's quite addictive, though, and rather nicely programmed. At least there's no mutant ninja bashing..." Rod Lawton



• Fed up of being thrashed by the infuriating layouts? Then design your own (easier) levels. Here's one we made earlier. Stylish, eh?

• Every four levels a special guardian needs defeating. This chap has to be struck several times with the ball before you can pass

• The barriers that block the tunnel vary in size, shape and position. Some allow a fairly wide berth. Others aren't quite so generous...

ACTION TEST

HELTER SKELTER

AUDIOGENIC ■ £10.99 cass, £14.99 disk

Monsters, monsters everywhere, in your beer, and in your hair. Big ones, little ones, cute ones, ugly ones. But they all have two things in common... they are all monsters, and they are all dead meat.

Helter Skelter is a fairly old platform game which has only just made an appearance on the CPC. Platform games are ten-a-penny these days, and so originality and style are essential if a game is to stand out from the crowd. So how does Audiogenic's latest outing fare?

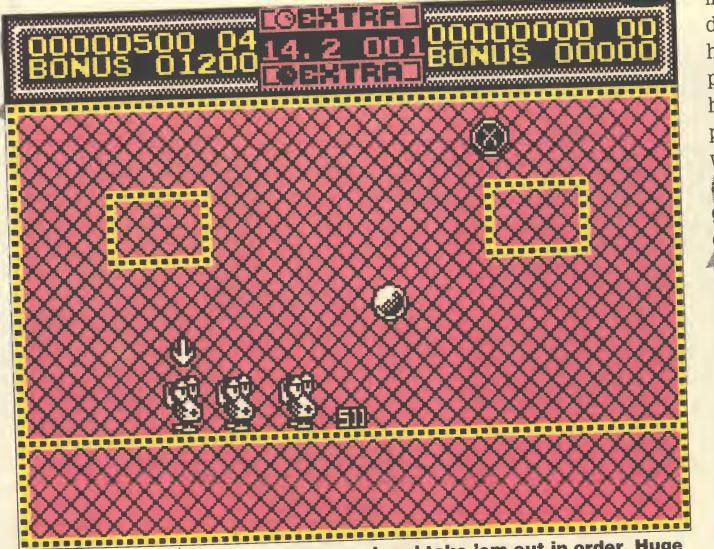
The object of the game is a simple one. You control a bouncing ball called Billy, whose only aim in life is to kill monsters. Fortunately, the world he finds himself in has no shortage of monsters to kill.

The joystick controls the direction your little ball moves in, while hitting Fire makes him bounce.

Simply leap onto the monsters and squish the little suckers. Easy, huh?

Well, no, not exactly. The monsters have to be wasted in the right order, that order being indicated by a floating arrow hovering above the next monster due for destruction. Hitting a monster out of turn causes it to multiply, meaning you have even more critters to kill within your allotted, and very short, time limit. Speed and patience are required.

SECOND OPINION
"Helter Skelter starts off OK, but before long you find yourself getting more and more frustrated by its difficulty, horrible time limits and fiddly control. About the only use for the screen designer is to build a game you can play!"
Rod Lawton



This could be easy - keep your cool and take 'em out in order. Huge bonuses await those who succeed in this awesome task.

The physics of the game are very important to any kind of progress. The ball can be made to perform several different kinds of jump through either prolonged or staccato use of the Fire button, and it takes a great deal of practice to get it right. As you complete each screen, things start to get harder - more beasties, and infinitely more tortuous mazes of platforms - making the monsters much harder to reach.

A fairly novel feature of Helter Skelter is the screen editor. This is very simple to use. You can quickly build incredibly difficult platform setups, or for that matter outrageously easy screens.

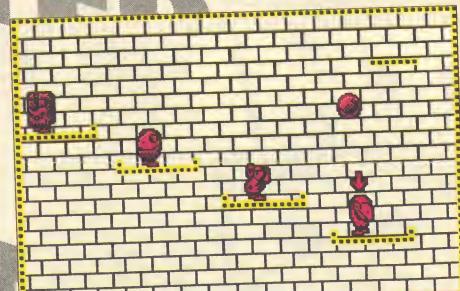
The graphics look fine at first glance, neither spectacular, nor colourful but competent and well drawn... until things start moving, that is.

The animation of the monsters and the main Billy sprite is absolutely abysmal. Billy jerks spasmodically from place to place - unforgiveable in a game where pixel-perfect jumping is essential to success. The control method is poorly implemented, and almost unworkable at times. The ball just won't

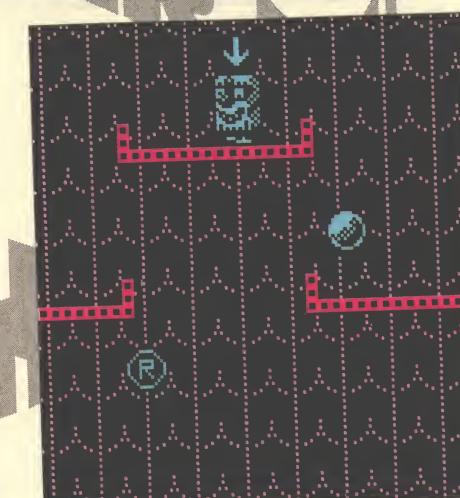
do what you want it to, and most of the tiny time limit is spent trying to get the damned thing under control.

Sonics are reasonable, but nothing special. Presentation is professional, and further enhanced by the inclusion of that screen designer. What could have been an excellent platform game, however, has been spoiled by poor programming, and the whole thing has the appearance of a budget game. Games seem to be going up in price these days, and if software houses insist on these price hikes (part of the continuing struggle against piracy) then they should at least justify the extra expense with a half decent game, and this one isn't.

It really is a bit of a shame, because the idea behind Helter Skelter is



• Billy the bouncing balloon boings beautifully. Below, bad boys await their doom. Bounce them in order, dudes.



• What do you go for, the power-up or the filthy monster, who just happens to be the last one on the screen?

a good one. Sadly, the whole thing has been poorly implemented, and Amstrad owners deserve more than this for ten quid.

Frank O'Connor

FIRST DAY TARGET SCORE

Try not to smash up your Amstrad

HELTER SKELTER VERDICT

GRAPHICS 61%
Drab graphics are not helped by diabolical animation.

SONICS 55%
Totally and utterly average, bordering on grim.

GRAB FACTOR 69%
Initially inviting, and often cute, it is quite easy to get into.

STAYING POWER... 56%
The control method's much too tough to keep you playing.

RATING 59%
Totally bogus, dudes. Not incompetent, but it looks and plays like a budget game.

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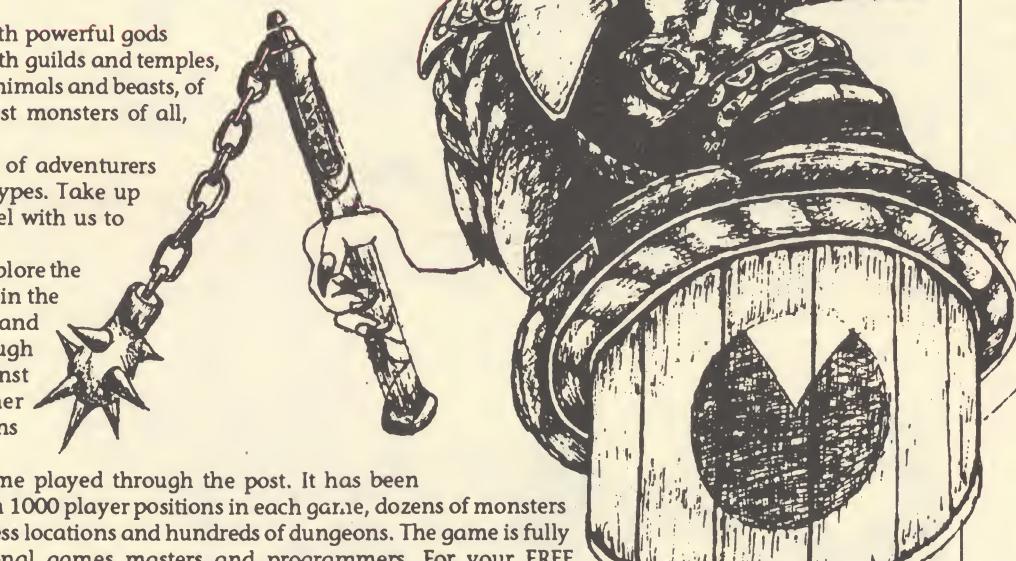
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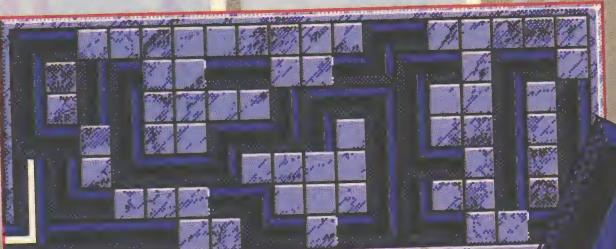
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ACTION TEST



You are in major league trouble now - the screen is full of useless guff, and things are looking pretty grim. What you need is an eraser block!



Things may look pretty diabolical, but there are actually a couple of really easy loops nearing completion. All you need are the right pieces...

LOOPZ

AUDIOGENIC ■ £10.99 cass, £14.99 disk

Ever tried eating a plateful of spaghetti with a knife? Loopz is something like that... well, sort of. Or maybe it's more like trying to do a jigsaw with oven gloves on...

Loopz owes a lot to that granddaddy of puzzle games Tetris, but instead of trying to slide blocks together to leave no gaps, you're joining them end to end. Your aim is produce complete loops, which then obligingly disappear, leaving you space to start again.

Tetris gave you only a few seconds to find a home for the blocks that appeared at the top of the screen. In Loopz, this diminishing time is indicated by a sliding bar at the bottom of the screen. Fail to find a home for your piece in the time available and you lose one of your three lives.

The pieces can be rotated, as they can in Tetris, and moved about your playing area at will. The control method is a bit odd, though. Using a joystick, you have to press Fire and push right to



SECOND OPINION

"At first Loopz looks like a cross between Pipe Mania and Tetris. Play it for a while, though, and you find out it's got a style and addictiveness all its own. It's compulsive stuff, and once you start playing, you simply can't stop!" Rod Lawton

rotate, and press Fire and left to drop a piece. Your task might sound simple enough, but the time limit imposed on the placement of each piece tends to mess with your reactions, often causing you to drop a piece in exactly the wrong place. The pieces you really need never seem to show up when you want them to, and the screen soon fills up with potentially useless bits of spaghetti.

As frenetic as things get, there is usually a way to complete a loop, but actually spotting a possible success in a very busy screen is another matter entirely. The game has several skill levels, and three distinct game types.

Game A is the simplest option - you simply keep going as long as possible, given that the playing area is slowly filling up with use-

less bits of loop and you start getting some very weird shapes... aaaaarrggghhh! Best of all, though, is the simultaneous two-player mode where both players score independently and embark on a mad struggle to nick each other's loops.

Game B is similar, but now the time available for placing each piece diminishes every ten loops you make. In two-player mode, you each take it in turn to place the pieces. This time it's a co-operative business, so no lost friendships this time.

Game C is perhaps the most difficult. Loopz of varying shape and size are shown and then sections are highlighted and removed. You have to remember where you saw them placed, and when they reappear, try to place them in their original place... very Krypton Factor-ish.

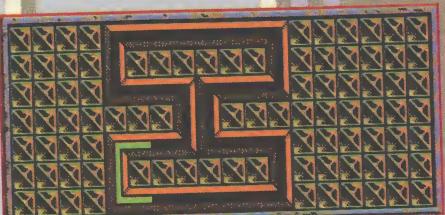
The various skill levels and game types give this title a great deal of variety, and a genuinely lasting challenge.

The graphics are better than they really need to be, with a nice, marble-effect playing area. Control is pretty smooth and responsive

once you get the hang of the quirky control method, although in simultaneous two-player mode things do slow down rather, adding to the general confusion. The game is accompanied by a haunting, atmospheric soundtrack, plus a few warning beeps when you get things wrong - try to land a piece so that the loop trails off the screen and it won't let you, emitting a warble just like the one at a Sainsburys check-out when the barcode reader gets confused... funny, that.

The presentation is good, but sheer playability is what makes Loopz shine. Cor, what a wheeze!

Frank O'Connor



Game C is a bit different. You must rebuild missing sections of a predetermined shape... trickier than it sounds.



Insert the highlighted corner, and only one more piece is needed to complete the whole puzzle. Don't lose your head.

FIRST DAY TARGET SCORE

30 loops on Level 0

LOOPZ VERDICT

GRAPHICS.....

Well drawn, and more than adequate for this type of game

75%

SONICS.....

A spooky tune plays throughout, and very good it is too.

82%

GRAB FACTOR.....

Aack! So simple, and so addictive, you'll be hooked from the start.

89%

STAYING POWER...

Monster fun, and a good variety of game styles.

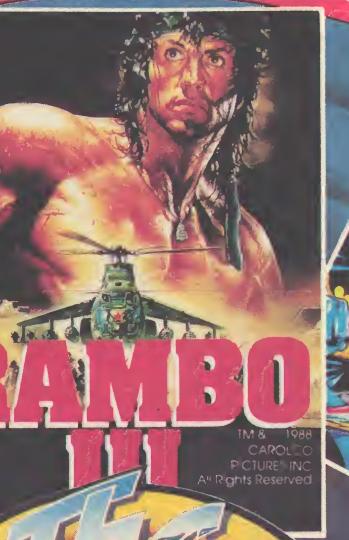
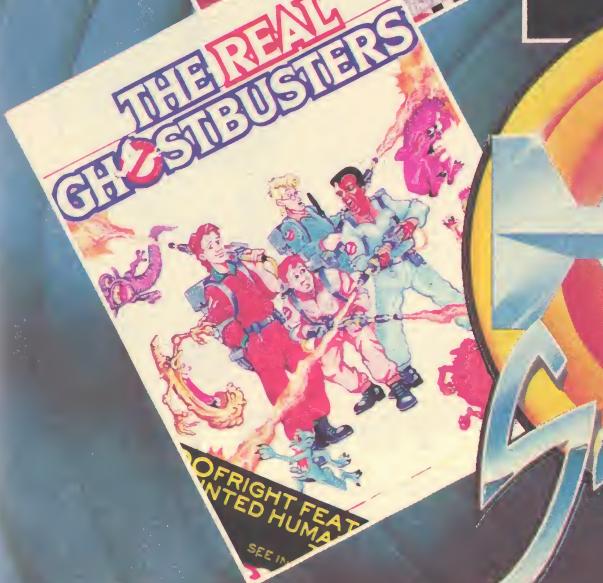
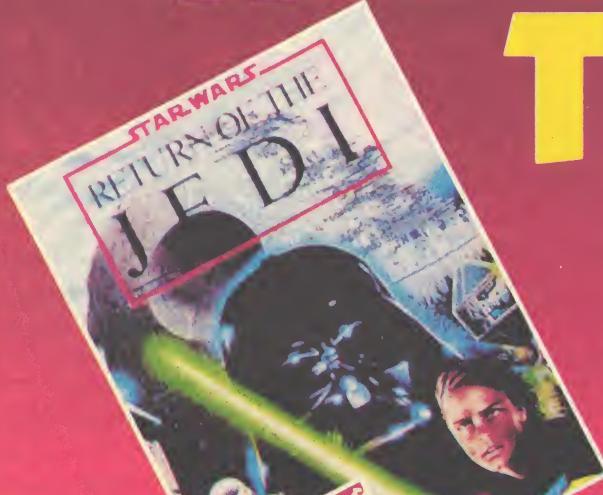
90%

RATING

87%

More fun than a guy should have - hours of puzzling mayhem.

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Cheat Mode

Another six pages crammed with game hints, tips, help and solutions...

Are you stuck on your favourite game? Could you use some help? This is the place! Every month, AA's champion of cheating, Phil Howard, assembles all the best hints, tips, pokes, maps and solutions sent in by our readers.

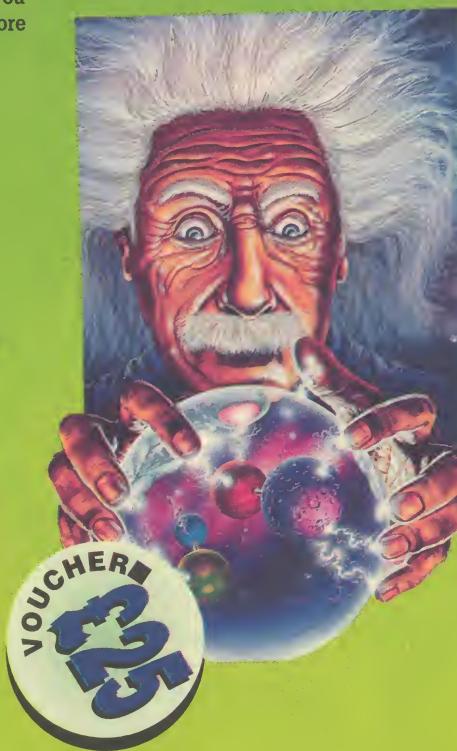
Passwords, keypress cheats and maps speak for themselves, but for determined cheaters is also the arcane art of poking...

E-Motion

Good old Johnny Girvin has bounced back with this great cheat for the dis(c,k,que) version of E-Motion. It provides a choice of options to beat this US Gold Mastergame. Yahoo! Leave out the cheat lines you don't want. It's another of those games that you really need to CAT an ordinary disk before running (dodgy loader)!

```

{BvAr} 1.'E-MOTION.hacks-(disk)
{LnAp} 2.'By-John-Girvin
{JvAp} 3.'September-1990
{FtAj} 4.'
{DkAt} 10.OPENOUT"disk":MEMORY-&916F
{JjAr} 20.CLOSEOUT:MODE-1
{CuAq} 30.LOAD"disk",HIMEM+1
{CwAq} 40.addr-&BEE80:RESTORE
{HmAn} 50.READ+byte$
{OnBk} 60.IF+byte$="YAHOO":THEN.CALL-&B80
{JjAs} 70.POKE+addr,VAL("&+byte$")
{BmAr} 80.addr=addr+1:GOTO-50
{ItAq} 90.'***.LEAVE IN.***
{CiAw} 100.DATA-21,70,91,11,70,01,01,24
{CnAx} 110.DATA-04,ed,b0,3e,c3,21,9f,be
{FnBj} 120.DATA-32,0e,bc,22,0f,bc,c3,70
{NpAw} 130.DATA-01,a4,48,4c,46,09,5a,cd
{NmBj} 140.DATA-37,bd,af,cd,0e,bc,21,e7
{LiAw} 150.DATA-be,22,b7,9c,c9,f5,d5
{CvBj} 160.DATA-e5,06,f5,ed,78,1f,30,fb
{KtBj} 170.DATA-21,f9,4e,00,00,06,21
{OqAw} 180.DATA-3e,0c,be,20,01,72,19,10
{CnBj} 190.DATA-f9,e1,d1,c1,f1,c9,f5,c5
{MjBj} 200.DATA-d5,e5,21,14,4f,11,0f,00
{IuBj} 210.DATA-06,21,72,23,72,19,10,fa
{KoBj} 220.DATA-e1,d1,c1,f1,c3,a5,0e,21
{BsAx} 230.DATA-ad,be,11,40,00,01,3a,00
{FrAw} 240.DATA-ed,b0,21,61,00,22,a3,0e
{EqAm} 250.DATA-af
{LqAr} 260.'Infinite-lives
{MeAp} 270.DATA-32,87,2a
{GxAg} 280.'Infinite-energy
{IvAt} 290.DATA-32,21,13,32,29,13
{DnAq} 300.'Balls don't explode
{CoAr} 310.DATA-32,05,2e
{KiAq} 320.'Pods don't grow
{OwAs} 330.DATA-3e,18,32,9e,38
  
```



Multiface pokes for E-Motion

Address	Poke	Effect
28A7	00	Inf lives
1321	00	Inf energy
1329	00	Balls don't explode
2E05	00	Balls don't explode
389E	18	Pods don't grow

Fire & Forget

I did have something pretty interesting to say about this final disk cheat from the Emerald Isles masterblaster, John Girvin, but I've forgotten what it was! (You're fired - ed.)

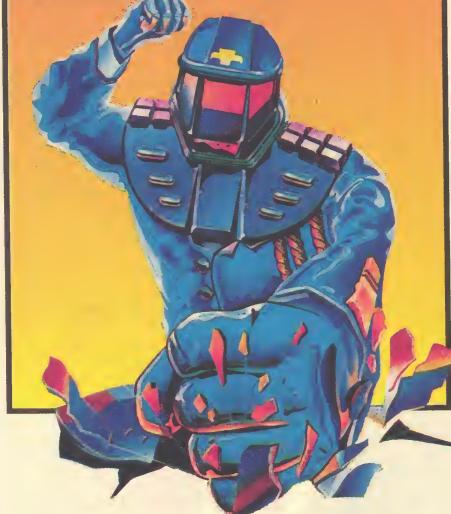
```

{JuAt} 1.'FIRE-&FORGET-(disc).hack
{LnAp} 2.'By-John-Girvin
{DtAq} 3.'October-1990
{FtAj} 4.'
{JvAr} 10.OPENOUT"disk":MEMORY-&F00
{JjAr} 20.CLOSEOUT:MODE-1
{NsAs} 30.LOAD"prog.bin",&F80
{GpHo} 40.POKE-&13BD,0
{GqAq} 50.POKE-&1442,0
{KkAm} 60.CALL-&1000
  
```

John tells me that no Multiface poke is possible!

Venom Strikes Back

Here's a bit of luck! I was just looking through a batch of old games the other day when I stumbled across this keypress cheat for Gremlin's Venom Strikes Back - if you select the password option, then type JUDGE DREDD, you get infinite just about everything...



The Spy Who Loved Me

If you own Domark's The Spy Who Loved Me you will know that you can load either a 464 or a 6128 version of the same game (good idea, eh?). Anyway, not to be outdone, Andy Price has done a cheat for both (you just try and stop him - not many protections do!). Make sure you use the right one for your machine!

```

{CkAr} 1.'The-spy-who-loved-me
{GoAu} 2.'464-disk-version
{GxAr} 3.'by-ANDY-PRICE
{FtAj} 4.'
{FnAs} 10.DATA-21,6e,0f,36,c3,23
{EnAt} 20.DATA-36,ae,23,36,0f,c3
{BuAu} 30.DATA-f8,0e,af,32,3c,11
{CxAu} 40.DATA-21,6e,0f,36,cd,23
{FuAt} 50.DATA-36,00,23,36,10,c3
{JxAs} 60.DATA-6e,0f,21,00,40,11
{GsAs} 70.DATA-00,02,01,00,0e,ed
{JxAv} 80.DATA-b0,21,00,60,11,a0
{IxAt} 90.DATA-0f,01,20,00,ed,b0
{InAo} 100.DATA-c3,a0,0f
{HkAs} 110.OPENOUT"hak":MEMORY-&FFF
{MjAr} 120.LOAD"spy.bin",&4000
{NlAr} 130.FOR.x=&6000 TO-&6038
{ItAs} 140.READ+y$:y=VAL("&+y$")
{LtAs} 140.READ+y$:y=VAL("&+y$")
  
```

```

{HkAs} 110.OPENOUT"hak":MEMORY-&FFF
{MjAr} 120.LOAD"spy.bin",&4000
{ItAs} 130.FOR.x=&6000 TO-&6038
{LtAs} 140.READ+y$:y=VAL("&+y$")
{PtAr} 150.POKE-x,y:z=z+y:NEXT
{CwAu} 160.IF.z<>&1031.THEN-180
{HiAp} 170.CALL-&6020
{HmAr} 180.PRINT"DATA.error"
  
```

Multiface poke (6128)

Address = 123C Poke = 00



Quattro Super Hits

For the fifth time (is it?) Andy Price kicks off the proceedings with a multiple poke for yet another Codemasters compilation. This time it's Quattro Super Hits and, once again, you get a cheat for each of the four games. Good man, Andy! You do know there's a Dizzy compilation kicking about somewhere, do you?

```

{EjAp} 30.POKE-x,cd:NEXT
{GwBj} 40.MODE-1:1:1:PRINT"Choose Game:"
{JmAv} 50.PEN-1:1:PRINT"1..Super-Stuntman"
{PvAp} 60.PRINT"2..Super-Tank"
{GtAt} 70.PRINT"3..Super-Hero"
{ItAu} 80.PRINT"4..Italian-Super-Car"
{HoAt} 90.PRINT:INPUT"Number: ",n
{OpAt} 100.ON-n.GOSUB-160,120,140,200
{LqAm} 110.GOTO-390
{GpAv} 120.RESTORE-360:GOSUB-220
{JxAn} 130.RETURN
{P1At} 140.RESTORE-380:GOSUB-220
{M1Am} 150.RETURN
{JiAw} 160.PRINT:PRINT"Super-Stuntman:"
{NsBk} 170.PRINT:PRINT"Type-LIVEWIRE-into"
{PiAv} 180.PRINT"high-score-table"
{JvAv} 20.READ+cd$:cd=VAL("&+cd$")
{MuAl} 190.RUN"
  
```

NEW KIDS BLOCK

If it's worrying you that the pokes in Cheat Mode just look like a jumble of signs, squiggles and numbers to you, fear not, that's just what they are! Programs, written by specialists to take the control of loading function, alter, and then start the game. What you will need to do, should you want to use one, is:

1) Make sure the routine is written for your format - disk or tape - they will not generally work with both.

2) Type it in to the computer, making sure there are no errors.

● Typing in routines is always prone to errors, so there are a couple of things which are designed to help.

The first are the funny numbers within the "[]" brackets on the left. They are NOT to be typed in but are a code produced by the TYPE-WRITER program printed in the Type-Ins section this issue. It checks each line as it is typed in and produces a code which can be compared with that printed.

Secondly, all SPACES in the lines have been replaced by dots (which cannot be accessed from the keyboard, by the way), the idea being that it makes them easier to see. Got a DOT? Replace with a SPACE!

Quite often the routine itself will have a built in check on the DATA numbers and will advise you if one of them is typed in wrongly. User-friendly or what?

3) Save the program to tape or disk (not the game tape or disk) so that it can be used again.

4) Put in the game tape or disk and type !TAPE or !DISC.

5) Type RUN to run the routine (not RUN "" (CTRL+ENTER) as you normally would)

You should find that the game will load normally, or you will be given instructions on what needs to be done.

```

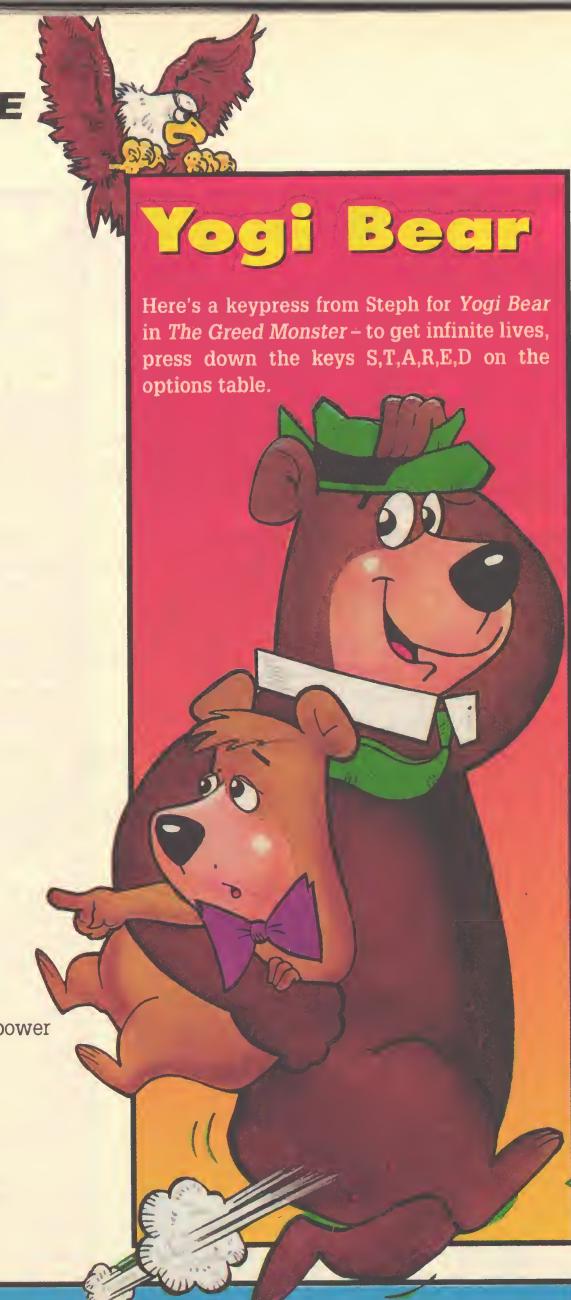
{AuAu} 200·RESTORE·340·GOSUB·220
{NvAn} 210·RETURN
{OoAs} 220·FOR·x:=$·BE2B·TO:=$·BE31
{EoAx} 230·READ·a$:POKE·x,VAL("+"&a$)
{IvAm} 240·NEXT:RETURN
{DnAs} 250·DATA·ED,5B,38,BD,E5
{AJAs} 260·DATA·A5,ED,53,33,BE
{PlAs} 270·DATA·E1,AC,DD,21,37
{NpAs} 280·DATA·BD,3E,C3,DD,77
{MnAr} 290·DATA·00,3E,2B,DD,77
{NvAs} 300·DATA·01,3E,BE,DD,77
{ExAs} 310·DATA·02,21,40,00,E3
{OwAr} 320·DATA·11,00,BB,37,3F
{ChMq} 330·DATA·C3,4A,3A,00,00
{HwAs} 340·DATA·AF,32,C8,17,32
{CoAs} 350·DATA·91,4F,00,00,00
{MxAt} 360·DATA·AF,32,F6,37,32
{OuAq} 370·DATA·2B,99,00,00,00
{AwAt} 380·DATA·AF,32,63,37,32
{MkAq} 385·DATA·6A,37,00,00,00
{NtAp} 390·POKE·&BE32,ACF
{FpAr} 400·MEMORY·&3000:LOAD"
{ApAo} 410·CALL·&BE00

```

Multiface pokes for Quattro Super Hits

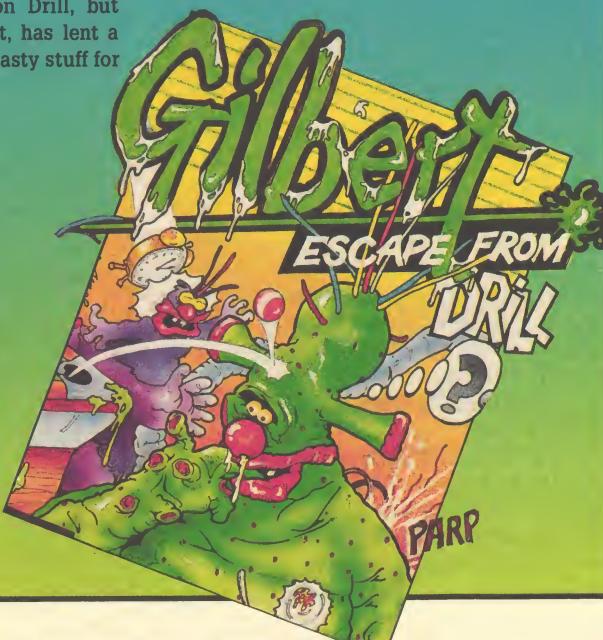
Address Poke Effect

Super tank Sim		
37F6	00	Inf lives
992B	00	Improved firepower
Super Hero		
3763	00	Inf lives
376A	00	
Italian Supercar		
17C8	00	Inf takes
4F91	00	Stop the clock
Super Stuntman		
Type "LIVEWIRE" into hi-score table		



Multiface pokes for Gilbert (tape)

Address	Poke	Effect
0797	18]	Inf time
0798	29]	
10A6	A7	Inf snot (ugh!)



Gilbert

Years ago, my heroes were Torchy and Spotty Dog (Rod will remember!). These days you have nasty squishy little oiks like Gilbert the green globule - no taste at all! Personally, I would like to see him stay on Drill, but Graham Smith, loyal to the last, has lent a hand, and got it smeared with nasty stuff for his trouble.

```

{MpAq} 1·'·Gilbert--·Ecscape
{BjAt} 2·'·From·Drill---·(tape)
{HwAq} 3·'·By·Graham·Smith
{OnAu} 4·'·Infinite·time·&·snot
{FuAq} 5·'·
{HIAu} 10·DATA·11,00,80,43,cd,77
{InAv} 20·DATA·bc,21,6f,00,22,5b
{MqAr} 30·DATA·08,eb,e9,21,18,29
{CrAt} 40·DATA·22,97,07,3e,a7,32
{JtAr} 50·DATA·a6,10,c3,00,03
{KxAr} 60·FOR·j=0·TO:28·READ·a$
{ArAt} 70·x=VAL("+"&a$):y=y+
{IiAq} 80·POKE·j+96,x:NEXT·j
{DlAr} 90·IF·y()>2538·GOTO·110
{GwAr} 100·MODE·1:CALL·96
{HuAq} 110·PRINT"data·error"

```

Operation Gunship

Simon Clark of Princes Risborough (remember the John Ottaway song? - maybe not!) in Bucks has supplied the co-ordinates of the hostages for Codemasters' *Operation Gunship*, and very useful they are too. Thanks, Simon.

HostageX co-ord Y co-ord

Level 1

1	K2	J8
2	L6	L9
3	L9	L8
4	K7	K7
5	J5	J4
6	K4	L7
7	J6	L9
8	J3	L

Level 2

1	L2	K7
2	N2	J2
3	N6	K5
4	O6	J3
5	M5	K3
6	K	K5
7	J3	J3
8	P2	K1

Level 3

1	J4	M4
2	K3	L2
3	K5	J5
4	J3	J7
5	K2	N9
6	J1	N9
7	J7	P1
8	K5	O7

Level 3

1	J1	K7
2	K4	J1
3	L3	K2
4	L3	L5
5	K2	L0
6	J2	M1
7	J1	L4
8	K4	K7

Xenon

My pal, Carl (don't forget to mention my newsletter Playmates) Surry of Barnet has found a pretty useful way to locate keypress cheats, but I'm not going to tell you how he does it - you'll have to read his newsletter for that! What I can divulge is a cheat he has found for *Xenon* - start the game, press Esc to pause, then hold down the keys T,I,N,Y, and a message will appear to tell you that your craft is now invulnerable.

Kwik Snax

Another game perishes under the all-consuming keyboard of Dunstable's prolific poker Andy Price. This time it's Codemasters' "Dizzy meets the Advanced Fast Food Simulator 2", or their slightly less imaginative name - *Kwik Snax*. Say, guys, what's happening to your naming policy?

```

{LkAm} 1·'·Kwik·Snax
{GwAr} 2·'·by·ANDY·PRICE
{FsAj} 3·'·
{BsAq} 10·DATA·21,09,be,22
{MiAq} 20·DATA·49,40,c3,00
{CuAq} 30·DATA·40,af,32,c9
{CiAr} 40·DATA·19,c3,40,00
{EkAp} 50·FOR·a=&BE00·TO:=$·BE0F
{MjAu} 60·READ·b$:b=VAL("+"&b$)
{JqAp} 70·POKE·a,b:NEXT:MODE·1
{HtAr} 80·MEMORY·&3FFF:LOAD"
{KpAo} 90·CALL·&BE00

```

Multiface poke for Kwik Snax

Address = 19C9 Poke = 00

Laser Squad

Next on the chopping block from master Multifacer Paul Stuart Williams of Broomhall is a total cheat for *Laser Squad* on disk and tape (they are both the same!). It looks as if Paul has developed a new art form with this type of complete game Multiface system. You might be better off using the Multiface "Window" option to insert these pokes, and if you can't win now you never will!

Character 1 info starts at 8145
 Character 2 info starts at 816D
 Character 3 info starts at 8195
 Character 4 info starts at 81BD
 Character 5 info starts at 81E5
 Character 6 info starts at 820D
 Character 7 info starts at 8235
 Character 8 info starts at 825F



Start	+ 00 = 00-FF Move points	= 0-255
	+ 02 = 00-FF Constitution	= 0-255
	+ 04 = 00-FF Stamina	= 0-255
	+ 06 = 00-FF Morale	= 0-255

Assassins	7E9B	00-FF 0-255 ammo
Moonbase	7EF6	00-FF 0-255 ammo
Mines	7EF5	00-FF 0-255 ammo
Cyber Hordes	7FEF	00-FF 0-255 ammo

Multiface poke for inf lives on Steel Eagle

Address = 1B98 Poke = 00

Steel Eagle

Players' new game *Steel Eagle* has been well and truly polished off by eagle-eyed man of steel, Andy Price (where have I heard that name before?), Dunstable's heavy-duty high-flying hacker.

```

{DiAt} 40·IF·y()>2799·THEN:130
{GkAv} 50·PRINT"Use·appropriate·side"
{OpAn} 60·CALL·&40
{IjAt} 70·DATA·06,05,21,5b,00,11
{HnAs} 80·DATA·00,05,cd,77,bc,21
{AtAt} 90·DATA·0c,1b,cd,83,bc,cd
{ApAw} 100·DATA·7a,bc,af,32,98,1b
{IjAu} 110·DATA·c3,0c,1b,53,54,45
{JpAp} 120·DATA·45,4c
{BmAu} 130·PRINT"data·error":STOP

```

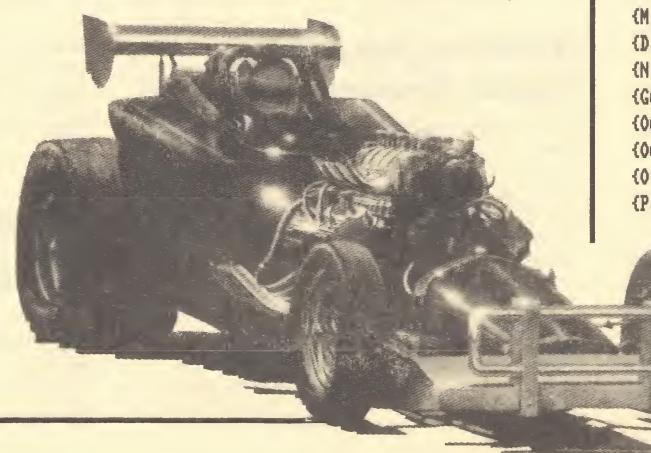
Stunt Car Racer

Well, here's the tape poke for one of the highest AA-rated games of all time, *Stunt Car Racer* - yet another poke from Andy Price of Dunstable. You get infinite boost and invulnerability, which is just what stunt car racers need for this joystick-wrenching rollercoaster of a game.

```

{LtAo} 160·CALL·&BE00
{OkAr} 170·PRINT"DATA·error"
{DxAt} 1·'·Saboteur·2--·Encore
{GwAr} 2·'·by·ANDY·PRICE
{FsAj} 3·'·
{MoAr} 10·DATA·21,00,03,11,00
{K1Ar} 20·DATA·01,3e,16,cd,a1
{PtAt} 30·DATA·bc,21,94,be,22
{MoAs} 40·DATA·7e,03,c3,00,03
{DoAs} 50·DATA·3e,00,32,f4,33
{NiAr} 60·DATA·3e,35,32,c6,3a
{GuAt} 70·DATA·3e,35,32,05,3c
{WwAt} 80·DATA·3e,00,32,0e,96
{CwAo} 90·DATA·c3,00,04
{CoAq} 100·FOR·a=&BE00·TO:=$·BE0F
{PuAt} 110·READ·p$:p=VAL("+"&p$)
{KmAu} 120·POKE·x,p:y=y+p:NEXT
{HnAt} 130·IF·y()&CD0:THEN:240
{OiwA} 140·MODE·1:INPUT"inf·time";y$

```



Multiface poke for Stunt Car (tape)

Address	Poke	Effect
2177	00	Inf boost
98C3	C9	Invulnerability

MoAr	10·DATA·21,00,03,11,00
K1Ar	20·DATA·01,3e,16,cd,a1
PtAt	30·DATA·bc,21,94,be,22
MoAs	40·DATA·7e,03,c3,00,03
DoAs	50·DATA·3e,00,32,f4,33
NiAr	60·DATA·3e,35,32,c6,3a
GuAt	70·DATA·3e,35,32,05,3c
WwAt	80·DATA·3e,00,32,0e,96
CwAo	90·DATA·c3,00,04
CoAq	100·FOR·a=&BE00·TO:=\$·BE0F
PuAt	110·READ·p\$:p=VAL("+"&p\$)
KmAu	120·POKE·x,p:y=y+p:NEXT
HnAt	130·IF·y()&CD0:THEN:240
OiwA	140·MODE·1:INPUT"inf·time";y\$

The ubiquitous (look it up!) Andy Price has had a break from his usual pokes with this complete solution to that ferociously difficult game *The Munsters*. If you own a Multiface, try poking Address 1EE7 with A7 for infinite energy, otherwise you will have to wait 'till next month for the tape poke!

- 1 Charge up your spell power by shooting ghosts upstairs (move from room to room when things get too fast).
- 2 Go down the left-hand stair way. Keep out of the way of the ghoul, go right and get the key.
- 3 Go upstairs, and right to the other staircase, make sure your spell power is at maximum.
- 4 Go down get the candle on the left, avoid the ghoul, shoot the guardian.
- 5 Go right into the garden, get the bowling (crystal) ball then go right to get the candle.
- 6 Turn around and head back to the house. Shoot the ghouls that walk towards you.
- 7 Up the stairs, left along the landing, charge spell power to maximum.
- 8 Down the left-hand staircase and go left.
- 9 Shoot all 3 guardians that come towards you, get the cross.
- 10 Go right shoot the guardian above the cellar steps.
- 11 Go down turn left on the stairs and shoot another 3 guardians.
- 12 Get the key and walk right, get the elixir.

The Munsters



- 13 Pick up Herman and walk right (protect Herman, only he is vulnerable now).
- 14 Go right through the tunnel, avoiding the ghouls grabbing from the roof and esp

cially the flying ghost.
15 You will reach a room containing 5 panels with ghouls reaching out. Position Grandpa on one side and Herman at the other. When the ghoul has made a grab, move Herman past.

- 16 Go left and up the stairs, Grandpa will change into a bat and fly off to the right, showing the way.
- 17 You will need full spell power, so go back into the tunnel and shoot some ghouls before proceeding (avoid the flying ghost).
- 18 Go up the stairs into the church, turn right and shoot the guardian.
- 19 Go right, collect the ghost icon, turn and go left.
- 20 Shoot the guardian, go left and up the ladder.
- 21 Collect the ghost icon, then down and right, shoot the final guardian.
- 22 Enter the room and the little red chap will follow you.
- 23 Go left as far as possible and you will move on to the next section.
- 24 You control Spot the Dragon and are flying above the family car. Shoot, or dodge, the oncoming witches and bats.
- 25 When roadrunners or motorcyclists come towards the car, lift it out of the way using the Fire button.
- 26 On the final stage, select one of 4 doors. If a ghost appears, shoot it.
- 27 Congratulations, you have completed the game!

```

{EmAx}150. IF.y=="n".THEN.POKE.&BE95,&35
{LqAs} 160.INPUT"longer.jumps";y$ 
{PqBi} 170. IF.y=="y".THEN.POKE.&BE9A,0
{EmAq} 180.INPUT"enemies";y$ 
{NuAw} 190. IF.y=="n".THEN.POKE.&BE9F,0
{OnAs} 200.INPUT"inf.energy";y$ 
{BvBi} 210. IF.y=="n".THEN.POKE.&BEA4,&35
{JmAt} 220.PRINT"*.Press.PLAY.*"
{CrAp} 230.CALL.&BE80
{JtAt} 240.PRINT"DATA.error":STOP

```

Multiface poke for Saboteur 2

Address	Poke	Effect
33F4	00	timer
3AC6	00	longer jumps
3C85	00	no enemies
960E	00	inf. energy

Fighter Bomber

Jamie Murray and his pals (Hackers Anonymous) of Lesmahagow and David Clayton of Radcliffe have been into *Fighter Bomber* and sorted out the keys which were missed off the instructions. Jamie has also dug out a neat little Multiface routine to get you into the more advanced missions.

F0	External views
Q,A,O,P	alters the views whilst in external mode.
Z and X	Zoom in and out.
F1	Pilot view.
R	Alters radar range (i.e. 1,3,6,12,25).
F4	Control Tower view.
N	Move to next target HDG and RGE and No. (Also airbase info once targets cycled through)
F8	View plane from above (zoom also).
F9	View plane from rear (zoom also).
F7,F5,F6	Right, rear, and left cockpit view.
C	Release Chaff.
F	Release Flare.
H	Pause / Unpause

Multiface poke for Fighter Bomber

This works on both the disk and tape version. Wait until the Pilot select screen is displayed, input a name into the top slot if you wish, but don't go on to select a plane. Stop the game with the Multiface and input the pokes.

Address	Poke	Effect
8E23	0A	Missions flown
8E25	0A	Missions completed
8E27	10	Targets destroyed

8E29 10 Planes shot down.

Then move on to select a plane and you will be able to fly any of the missions. Before you go, however, you may like to slip in this poke form Paul Williams which gives you 255 shots from the cannon.

Address = 75AC Poke = FF

Hong Kong Phooey

Stephen Troup from Kings Lynn has spoilt us with keypress cheats this month. The first is for *Hong Kong Phooey* – to get infinite energy, hold down the keys T,H,U,G,I on the options table.

Blazing Thunder

Another keypress from the excellent cheatfinder Stephen Troup is for *Blazing Thunder* – to get infinite lives, hold down the keys S,L,I,M,E on the options table.

Cheat Mode index

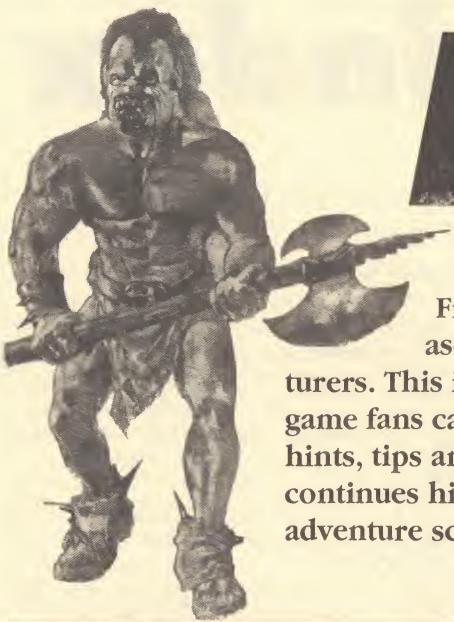
The number of cheats being published in *Amstrad Action* is increasing each issue, so there's no space to print all the cheats printed

over the last year. So Multiface owners will have to wait until next month for their cheats. Sorry, folks, but we're just doing too many games...!



3d starfighter quattro	Tape Poke	AA65
The munsters	Solution	AA67
Advanced pinball quattro	Tape Poke	AA65
After the war	Password	AA60
Airborne ranger	Tape Poke	AA58
Airborne ranger	Disk Poke	AA59
Aliens	Playing Tip	AA66
Altered beast	Playing Tip	AA57
Arcade flight sim' (quattro)	Tape Poke	AA64
Astro marine corps	Keypress	AA60
Astro marine corps	Password	AA60
Atv simulator	Tape Poke	AA62
Batman 3d	Disk Poke	AA59
Batman the movie	Disk Poke	AA57
Batman caped crusader	Solution	AA61
Bedlam	Keypress	AA57
Beyond the ice palace	Tape Poke	AA56
Black tiger	Disk Poke	AA60
Blade warrior	Tape Poke	AA61
Blazing thunder	Keypress	AA67
Bloodwyche	Playing Tip	AA62
Bloodwyche	Playing Tip	AA64
Bmx freestyle	Keypress	AA62
Bombfusion	Tape Poke	AA58
Bounty hunter	Keypress	AA59
Bubble ghost	Playing Tip	AA63
Buggy boy	Tape Poke	AA61
Castle master	Disk Poke	AA59
Castle master	Solution	AA59
Chase hq	Keypress	AA56
Classic arcadia	Tape Poke	AA56
Continental circus	Disk Poke	AA57
Continental circus	Tape Poke	AA64
Count duckula	Tape Poke	AA60
Cyberoid	Keypress	AA55
Cyberoid 2	Keypress	AA55
Dan dare 3	Playing Tip	AA64
Death stalker (quattro)	Tape Poke	AA64
Defenders of the earth	Tape Poke	AA63
Deliverance	Keypress	AA66
Dizzy	Keypress	AA66
Dizzy 3	Map	AA58
Dizzy 3 (fantasy world)	Tape Poke	AA63
Double dragon	Tape Poke	AA61
Dragon spirit	Tape Poke	AA57
Dragons lair 2	Tape Poke	AA60
Druid	Keypress	AA55
Dynasty wars	Keypress	AA63
E-motion	Keypress	AA61
E-motion	Keypress	AA63
E-motion	Disk Poke	AA67
Elven warrior	Tape Poke	AA56
Enduro racer	Keypress	AA66
Equinox	Keypress	AA62
Escape from robot monster	Tape Poke	AA63
Exolon	Keypress	AA55
Fighter bomber	Playing Tip	AA67
Fire and forget	Disk Poke	AA67
Frankenstein junior	Tape Poke	AA56
Fruit machine sim quattro	Tape Poke	AA65
Future bike simulator	Tape Poke	AA63
Game over 1	Password	AA65
Game over 2	Password	AA65
Ghost hunter	Keypress	AA66
Ghostbusters 2	Solution	AA55
Ghosts and ghouls	Playing Tip	AA64
Ghouls 'n ghosts	Disk Poke	AA58
Gilbert escape from drill	Tape Poke	AA67
Grand prix simulator	Keypress	AA58
Grand prix 2	Keypress	AA61
Grand prix sim quattro	Keypress	AA65
Grid iron	Keypress	AA60
Guardian angel	Tape Poke	AA63
Hard drivin'	Disk Poke	AA58
Heroes of the lance	Solution	AA61
Hong kong phooey	Keypress	AA67
Hoppin' mad	Tape Poke	AA58
Hostages	Disk Poke	AA64
Hotrod	Disk Poke	AA60
Human killing machine	Keypress	AA60
Ikari warriors	Tape Poke	AA58
Ikari warriors	Playing Tip	AA64
Impact	Password	AA64
Impassomale	Keypress	AA60
Indy jones + last crusade	Keypress	AA55
Indy jones temple of doom	Keypress	AA66
Into the eagles nest	Keypress	AA55
Into the eagles nest	Keypress	AA57
Italian supercar	Tape Poke	AA59
Italy '90	Keypress	AA61
Jaws	Tape Poke	AA66
Jaws	Playing Tip	AA66
Jinks	Keypress	AA57
Joe blade 3	Tape Poke	AA55
Joe blade 3	Playing Tip	AA58
Jungle warfare	Keypress	AA61
Klax	Disk Poke	AA61
Knightmare	Playing Tip	AA62
Kwik snax	Tape Poke	AA67
Laser squad	Playing Tip	AA56
Laser squad	Tape Poke	AA62
Last ninja 2	Keypress	AA60
Last ninja 2	Solution	AA62
Little puff	Keypress	AA58
Little puff	Solution	AA60
Little puff	Map	AA62
Live and let die	Tape Poke	AA64
Lords of chaos	Tape Poke	AA66
Lost caves	Tape Poke	AA55
Mega buck\$	Password	AA63
Midnight resistance	Keypress	AA66
Mig 29 soviet fighter	Playing Tip	AA63
Moto cross simulator	Tape Poke	AA62
Mutant fortress	Tape Poke	AA55
Myth	Playing Tip	AA57
Myth	Disk Poke	AA60
Myth history in the makin	Solution	AA63
Newzealand story	Keypress	AA55
Ninja massacre (quattro)	Password	AA64
Nuclear heist	Keypress	AA59
Olli and lissa 3	Tape Poke	AA57
Operation wolf (lightgun)	Keypress	AA56
Operation thunderbolt	Playing Tip	AA64
Operation gunship	Co-ordinate	AA67
P47 thunderbolt	Keypress	AA56
Periscope up	Tape Poke	AA63
Pipe mania	Password	AA59
Pipe mania	Disk Poke	AA61
Pirates	Playing Tip	AA59
Pirates	Playing Tip	AA63
Powerdrift	Tape Poke	AA61
Pro boxing simulator	Tape Poke	AA61
Pro power boat simulator	Tape Poke	AA62
Pro power boat simulator	Keypress	AA63
Psycho hopper	Tape Poke	AA59
Quattro power pack	Tape Poke	AA62
Quattro combat pack	Tape Poke	AA64
Quattro arcade pack	Tape Poke	AA65
Quattro adventure comp	Tape Poke	AA66

Quattro super hits	T
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Balrog

From the depths of Moria the Balrog ascends and greets his valiant adventurers. This is the section where adventure game fans can get the latest news, reviews, hints, tips and gossip. This month the Balrog continues his perusal of the public domain adventure scene...

Although originally only planning to do a two-part special on the few adventure games available in the public domain market, the Balrog has been amazed by the quantity of software available and the high quality of some of it. So, when I have the space I will try to mention more public domain software as I receive it.

The public domain is a great way to improve your adventure-playing skills at little cost as well as trying out the games of new and up-and-coming authors.

DATA PD Software Library

Recently set up by Tony Kingsmill, Data PD now has quite a collection of adventures and it even caters for some cassette adventures as well as disk games. Cost is £1 per 'selection'. For more details, write to Data PD Library at: 202 Park Street Lane, Park Street, St. Albans, Herts AL2 2AQ and Tony will send you his newsletter.

Scull PD

Although not running strictly an adventure library, Alan Scull certainly has quite a few adventures (mostly written by Simon Avery!). To order some PD software from Alan, send him some blank disks and £1 for each PD Disc you want (i.e. if you want Adventure Disks 1 & 2 then send him a blank disk and £2.)

• The above libraries are good places to start looking for PD adventures but most of the other libraries have the odd adventure as well. (Check out Caroline Lamb's 'Where to go' box this issue.)

If you run or know of a PD library that has some good adventures then write in and tell me and I'll mention them in next month's Balrog column.

Adventure PD

• CPM 1

The Island

Reviewed in AA53 and written by Ken Bond using PAW. *The Island* is a lovely text-only adventure. You start on board an old tramp steamer, returning to Britain after a long sojourn in the Far East. Unfortunately, while you were sleeping, the ship hit a mine left over from the Second World War and in the resulting confusion you lost consciousness. You awoke to find the ship rapidly sinking and the crew disappearing over the edge of the horizon in the ship's life-boats! So, you must try and escape from the ship before it sinks to the bottom of the sea!

The adventure is well-written and very enjoyable - a worthy addition to any adventurer's collection.

The Base

Also written by Ken, *The Base* is a two-part adventure as good as (if not better than) *The Island*. You start off inside a prison cell, from which you have to try to escape. In the second part, you try to break into a base and photograph some plans hidden in a safe.

If you enjoy playing these games, then contact Ken for information regarding his other two, *The Test* and *The Spiro Legacy*. Ken Bond is at: 17 Adel Park Gardens, Adel, Leeds, West Yorkshire LS16 8BN.

NEWS... NEWS... NEWS...

FSF converts games to CPC

FSF Software is a Spectrum Software house run by Larry Horsfield. Larry is a PAW expert and has written some brilliant adventures on the old Speccy. Well, Larry has just bought himself a brand new 6128 and is at this moment busily converting his three Spectrum games to the CPC. The games are *Magnetic Moon*, *Starship Quest* and *Axe of Kolt*. *Magnetic Moon* and the sequel *Starship Quest* are three-part adventures and very enjoyable, whilst *Axe* is a four-part - they should all be worth waiting for. For more details, write to Larry at: **FSF Adventures, 40 Harvey Gardens, Charlton, London SE7 8AJ**.

Wow!

Can anyone stop Joan Pantoff HPig and her amazing software company? The Balrog wishes that Joan would slow down so that he can catch up on reviewing all her games! She has released another four games! Two of them are re-releases (*Case of the Mixed-up Shymer* and *Flock*) and two of them are new titles. *Orb Quest* is a four-part *QUILLED* game, lovingly written by Paul and Timothy Stitt, and looks well worth playing. The second new title is a very strange (and funny) game called *Yarkon Blues*. In *Yarkon* you play Rik McQuick, hero and all-round good guy. The game is a space spoof and it too looks like it will be good. On speaking to Joan it seems she has even more games in the pipeline... for more details, write to WoW at: **78 Radipole Lane, Weymouth, Dorset DT4 9RS**.

Red Five Software

This is the name of the company responsible for the humorous *Yarkon Blues* mentioned above. Well, Red Five has two more games coming shortly - *2001: A Space Oddity* and the *Smirking Horror*. More details soon...

Scull PD

• PD DISC 43 ADVENTURES 3

Jason and the Argonauts

Your quest is to sail to the island of the Gods and find the Golden Fleece so that you can return home and claim your rightful throne from Pelias, who stole it after your father, Aeson, was killed. Unfortunately, your ship was in a freak storm and you lost all of your crew overboard (perhaps the game should be called Jason!); luckily, you survived (bit convenient really!).

Jason is a well-structured game written (again!) by Simon Avery. It's based on the Jason legend (and probably the film) and you'll meet the cyclops, sheep(!), a sphinx, dragon, centaur and other mythical creatures.

Boredom

This is the third in the 'adult' adventure trilogy by Simon Avery. You are Baz, a rather disappointing example of British youth. You live in a small town which scores a massive -1 for nightlife. To escape this boredom, you decide to go and find heaven. The only problem is you have led a far from angelic lifestyle so you can't get there by normal means (i.e. dying!).

Boredom is an average game with good humour in places but also some unfunny parts. Do not play *Boredom* if you are easily offended.

Jungle Bunny

You play the part of Tizpan, a regular hero who lives in a normal bamboo hut in a tree in the deepest of the jungles. Untouched by outside contact, you survive with the aid of Jayne, your lovely lady savage.

You wake one morning to find your beloved Jayne has been kidnapped. Not sure how you can live without her, you resolve to find her...

• PD DISC 84 NEIL SCRIMGEOUR ADVENTURES

(Also available from Wow at: 78 Radipole Lane, Weymouth, Dorset DT4 9RS. Price: £4.50 cassette, £3.50 disk.)

The Lost Phirious

This disk contains a science fiction trilogy entitled *The Lost Phirious*. Actually, it should be a quadruple, but the author never started writing the last in the series!

Far in the future, you are an interstellar scrap dealer who has just discovered information concerning the spaceship Phirious, which was lost many years ago. If you could just find the Phirious, then you would be rich beyond your wildest dreams...

You must first travel to Earth and find the

Getting in touch with the Balrog

If you want to write to the cuddly Balrog (I am not hideously ugly, as stated in AA65!) then send a letter, cluepot contribution, just for laughs or anything else (especially money) to: **The Balrog, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2AP**.

area in which to start looking for the Phirious and then go there... but in part one you don't even reach the Earth! Your greed sidetracks you on your way when you find another abandoned ship, Casiopia. You beam on board the Casiopia to have a look around when suddenly your own spaceship explodes! You must now find a way off the Casiopia and down to Earth...

In part two, subtitled *The Planets*, you eventually have managed to land on the planet Earth and you must now find out as much as possible about the location of the Phirious.

Falkrahanon, you now have a ship and supplies and are on the way to the Phirious when you are suddenly attacked by space pirates. You manage to lose the pirates, but you must land on a nearby planet, Falkrahanon, to refuel before continuing in your quest.

Originally reviewed in AA8 and AA10, the Pilg gave the games fairly decent reviews but criticised the lack of logic of some of the puzzles and the games' unoriginality.

Written by Neil Scrimgeour (who also has drawn some Level 9 graphics in the past), the *Phirious Trilogy* is enjoyable but is spoilt a little because, as part four was never written, you will never find the Phirious! Neil has made the first part easy, with the other parts getting progressively difficult. Worth getting.

BALROG'S POSTBAG

Want to tell the world about your adventuring discovery, gripe about a certain game, or complain about the lack of money being paid to the Balrog?

If so write to: **Balrog's Postbag, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2AP**.

Where to find games?

Please could you give me information on where to get games like *Hollywood Hijinx*, *Lurking Horror*, *Rigels Revenge* and *Dracula*?

Christian Aldridge
Essex

Hello Albert! All you need to join my merry band of adventurers is to send a blank cheque to... No, seriously, you've joined already - all you need to do is just buy *Amstrad Action* every month and read the Balrog column. If you have any questions or contributions, then send them to me at the above address and I'll include them in the magazine - it's as simple as that!

More PD adventures!

I am starting a PD Library called JPD, and so far I have a selection of programs but no adventures, so I would be most grateful if you could print my address so your readers can send me any.

The library is tape-only, and as long as they include a stamped SAE they will receive their tape bulging with PD

Justin Boniface
119 Grinstead Lane
Lancing
Sussex BN15 9DR

Well, as I've said before, the best place to find games that are no longer available in the shops is to look in the small ads of any of the various adventure magazines (eg *Adventure Probe* - 0492 77305). You could also try the Infocom swap line run by Nic Rumsey (03212 2737). If neither of these are any use, then just put an advert in one of the fanzines requesting the games you want - this (hopefully!) will work.

Another place to look is *The Adventurers Club Ltd*, which sells various CPC games. For more details phone Henry Mueller on 071 794 1261.

Join up today!

I would like to join your band of adventurers. I

Consider it printed Justin!

Clue Sniffing with the Balrog

Contributions are needed for this section, so if you have any clues for any adventure game, then please send them in – you'll be helping

our fellow adventurers in distress – the address, as always, is: Cluepot, The Balrog, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2AP.

The Big Sleaze - part 1

- Close front door of office to avoid land mining!
- Touch wires to start car.
- If you have no money, then drive to Astoria Boulevard and go to bank.
- Push obelisk in building on 21st street, open grille with crowbar from mac.
- Put battery in flashlight and turn it on.

Bored of the Rings Part 3

- Give brick to Gold-Bum.
- Wear sunglasses to reflect stare.
- Use de-bugger to kill Gremlins.

Guild Of Thieves

- In the billiards room, open the red ball.
- Hit the coal with the pick before hitting the mineral vein, as the latter causes the pick to break.
- The music sheet is a treasure and should be banked, unopened, to get a further 10 points.
- Before moving the statue in the temple, make sure you have the gloves from the garden. They solve a slippery problem.
- Having moved the statue, dig in the sand with your hands. This solves another slippery problem.

Moondust - Red Version

- Search the window in the chapel.

Mystery of Arkham Manor

- Spend the first night in the cemetery. You will need to photograph someone there after mid-

Lords & Ladies of Adventure

Once again, the Lords & Ladies of Adventure extend their knowledge to us lesser mortals. When writing, please remember to enclose a stamped self-addressed envelope, and don't ask for full solutions – tell the Lord or Lady exactly where you are stuck. When phoning, please do so only during sociable hours.

Knightmare.
Ross Younger, 3 Cammo Parkway, Edinburgh, EH4 8EP.

Adult II • Can I Cheat Death? • Doomlords • Firestone • Jason and the Argonauts • Roog • Spacey • Tizpan. Adam Maxwell, 9 Peth Green, Hetton-le-Hole, Tyne & Wear DH5 0EY.

Base • Hollywood Hijinx • Infidel • Island • Spiro Legacy •

night. Use the photo in a newspaper report – you will receive an interesting telegram.

- Give the wallet to Mrs. Lemin the next day.
- Use the knife in the Blacksmith.

Island

- To get the petrol: Put tube in filler cap, suck on tube and put tube in can.
- Deflate the dinghy to get past the barbed wire fence.

Pawn

- Go south from the corridor and get and examine the listing (to wander around without getting killed, type debug).
- The prism, carrot, green bottle, rations, armour, wall-paper and paste are red herrings.
- At the Laboratory, go NE before NW. At the high ledge after the rope bridge, also go NE before NW. At the crossroads in the tree, go SW before NW.
- Look under the safe before opening it.
- Wear the spiky boots to climb the ice tower wall.
- Before climbing down the rope, you must first get rope, then climb down and then drop the rope when you are on the high ledge.

Lord of the Rings

Brendan McGoldrick is stumped:

- He has three elfstones and is in Bree but he has no idea what the elfstones are for!

The Base

- Oliver Nally wants to know where the crowbar is?

Seabase Delta/Grange Hill

Michael Hill is stuck:

- In Seabase Delta, how do you get the car at the station to move?
- In Grange Hill, how do you get the matches and how do you get rid of the caretaker?

Lord of the Rings

Brendan McGoldrick is stumped:

- He has three elfstones and is in Bree but he has no idea what the elfstones are for!

Supreme Challenge

- Oliver Nally wants to know where the crowbar is?

Game Set & Match II

- Ian Botham Test Match, Basket Master, Super Hang On, Sprint Track 'n' Field, Steve Davis Snooker, Nick Faldo's Open Championship

Taito Coin Op Hits

- Rastan, Fly Shark, Bubble Bobble, Arkanoid, Starlight, Arkoid II, Renegade, Legend of Kage

Soccer Spectacular

- Football Manager, Peter Beardsley Soccer, World Cup Champion, Handball, Maradonna Soccer Supreme

The Biz

- Operation Wolf, R-Type, Batman, Caped Crusader, Double Dragon

Platinum Collection

- Ghouls n Ghosts, Strider, Black Tiger, Led Storm, Forgotten Worlds

Sega Master Mix

- Super Wonderboy, Crackdown, Dynamite Dux, Thunderblade, Turbo Outrun

100% Dynamite

- Afterburner, Last Ninja II, WEC Le Mans, Double Dragon

Tolkien's Trilogy

- The Hobbit, Lord of the Ring, Shadows of Mordor

WIN! WIN! WIN! WIN! WIN! WIN! WIN!

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(better to turn your mag over to read this)

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Please make cheques and/or postal orders payable to: Lazer Software

Type-ins

All the programs on the following pages are ones you can type in yourselves. If you reckon you're a bit of a whizz at programming, why don't you send us your own, though? Just keep them short, that's all. We're unlikely to use

Extensions

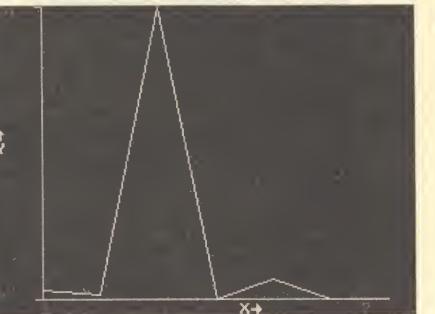
Extensions is from Marc Georgeson from Liverpool. It allows you to change the function of the keys on the numeric keypad quickly and simply. For example, pressing number 4 on the keypad will display "print", or for that matter, anything, be it a code, a word or a key command. Pre-sets are included, but can be changed to suit your needs easily.

```

{DoBj} 10·REM·*****·
{KjAs} 20·REM·*·NUMBER·EXTENSION·*
{AmAx} 30·REM·*·BY·MAC·MAC·1991·*
{MxBj} 40·REM·*****·
{MoAj} 50·REM
{LiBs} 60·MODE 1:INK 0,0:INK 1,26:INK 2,2:INK 3
,15:BORDER 0
{DxBr} 70·PLOT 0,0,1:DRAW 0,399:DRAW 639,399:DR
AH 639,0:DRAW 0,0
{JoB1} 80·LOCATE 10,2:PRINT 2:PRINT STRING$(20,"*")
{HnB1} 90·LOCATE 10,3:PRINT 2:NUMBER·EXTENSION·
*·
{MwBp} 100·LOCATE 10,4:PRINT 2:BY·MAC·MAC·1991·
*·
{InBi} 110·LOCATE 10,5:PRINT 2:PRINT 1:INFORMATIO
N"
{EsBo} 120·LOCATE 5,10:PRINT 3:PRINT 1:INFORMATIO
N"
{FiBr} 130·LOCATE 5,12:PRINT 2:SET·UP·EXT
ENSINS"
{FjBn} 140·LOCATE 5,14:PRINT 3:PRINT 3:EXIT·TO·BA
SIC"
{NtBm} 150·LOCATE 5,18:PRINT 1:PRINT "SELECT 1-3"
{ImBs} 160·IF·INKEY(64)=0·THEN·SOUND 1,1000,5,1
5:GOTO 210
{MjBs} 170·IF·INKEY(65)=0·THEN·SOUND 1,1000,5,1
5:GOTO 350
{HrBq} 180·IF·INKEY(57)=0·THEN·SOUND 1,1000,5,1
5:GOTO 690
{DwAm} 190·GOTO 160
{GIAk} 200·REM
{PsAt} 210·REM·*·INFORMATION·*
{OrAk} 220·REM
{CjAl} 230·CLS
{NmBj} 240·LOCATE 15,2:PRINT 2:PRINT "INFORMATION"
{IIfp} 250·LOCATE 2,5:PRINT 1:PRINT "THIS·PROGRAM
·CHANGES·THE·KEYS·0
9·ON··THE·KEYPAD·TO·MORE·USEFUL·COMMAND
S·FOR·EXAMPLE·IF·YOU·PRESS·0·THEN·YOU·W
ILL·GET·THE·'CAT'·COMMAND."
{DsAq} 260·PRINT:PRINT 2
{DtGi} 270·PRINT·*·BY·SELECTING·NUMBER·2·ON·THE
·MAIN·MENU··ALL·THESE·COMMANDS·WILL·BE·SE
T·UP·ONCE··THIS·IS·DONE·PRESSING·NUMBER·
3·ON·THE··MENU·WILL·RETURN·YOU·TO·BASIC
·SO·THAT··YOU·CAN·DO·WHAT·YOU·WANT."
{GsAt} 280·PRINT:PRINT:PRINT 1
{HnAp} 290·PRINT·*·REMEMBER·"
{NIBq} 300·PEN 2:PRINT·COMMANDS·ARE·INSTALLED
·EVEN·AFTER·EXIT"
{AxBm} 310·LOCATE 15,24:PRINT 3:PRINT "PRESS·A·KEY
"
{PpAv} 320·CLEAR·INPUT:CALL &BB18
{KIAv} 330·SOUND 1,1000,5,15:GOTO 60
{GmAk} 340·REM

```

anything longer than 6K, and we pay the same for all Type-ins, so you won't get any extra cash! Send your programs to: **Type-ins, Amstrad Action, Future Publishing, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW**



Graffiti, from one of our Swedish readers, can be used to plot graphically any statistics you care to try on it. Try plotting your grade averages, or your finances.

```

{IlAq} 350·REM·*·EXTENSIONS·*
{EuAl} 360·REM
{KnAk} 370·CLS
{FmBj} 380·LOCATE 15,2:PRINT "EXTENSIONS"
{HvCu} 390·N=0:FOR·M=6·TO·14·STEP 2:LOCATE 2,M:
PEN 3:PRINT·N=N+1:LOCATE 10,M:PRINT·N:
N=N+1:NEXT·M
{FkBr} 400·LOCATE 5,6:PRINT 1:PRINT "CAT":LOCATE 1
3,6:PRINT "LIST"
{BqBq} 410·LOCATE 5,8:PRINT "AUTO":LOCATE 13,8:P
RINT "DIR"
{PmBq} 420·LOCATE 5,10:PRINT "ICPM":LOCATE 13,10
:PRINT "TAPE"
{MqBq} 430·LOCATE 5,12:PRINT "IDISC":LOCATE 13,1
2:PRINT "IA"
{AxBt} 440·LOCATE 5,14:PRINT "IB":LOCATE 13,14:P
RINT "RUN"
{IxBj} 450·LOCATE 20,10:PRINT 2:PRINT">>>>
{IxBi} 460·LOCATE 25,6:PRINT 7·8·9"
{FxAv} 470·LOCATE 25,8:PRINT "4·5·6"
{OiAv} 480·LOCATE 25,10:PRINT "1·2·3"
{LxBn} 490·LOCATE 25,12:PRINT "0":CHR$(240);","
{AjCj} 500·LOCATE 25,14:PRINT·CHR$(242);CHR$(32
);CHR$(241);CHR$(32);CHR$(243)
{EuAk} 510·REM
{ApAq} 520·REM·*·INSTALL·*
{PqAk} 530·REM
{Ctas} 540·KEY 0,"CAT"+CHR$(13)
{DwAu} 550·KEY 1,"LIST"+CHR$(13)
{AwAt} 560·KEY 2,"AUTO"+CHR$(13)
{PwBj} 570·KEY 3,"DIR"+CHR$(13)
{CkAs} 580·KEY 4,"ICPM"+CHR$(13)
{AxAv} 590·KEY 5,"ITAPE"+CHR$(13)
{InAu} 600·KEY 6,"IDISC"+CHR$(13)
{NkAs} 610·KEY 7,"IA"+CHR$(13)
{CnAr} 620·KEY 8,"IB"+CHR$(13)
{Hias} 630·KEY 9,"RUN"+CHR$(13)
{ElAk} 640·REM
{GsBj} 650·LOCATE 15,25:PEN 3:PRINT "PRESS·A·KEY
"
{MuAv} 660·CLEAR·INPUT:CALL &BB18
{AtAw} 670·SOUND 1,1000,5,15:GOTO 60
{FxAk} 680·REM
{MpAr} 690·REM·*·EXIT·TO·BASIC·*
{FqAk} 700·REM
{HnAl} 710·CLS
{CjBk} 720·LOCATE 15,15:PRINT 3:PRINT "SURE·Y/N?"
{F1Bk} 730·IF·INKEY(43)=0·THEN·GOTO 760
{ItBq} 740·IF·INKEY(46)=0·THEN·SOUND 1,1000,5,1
5:GOTO 60
{DuAn} 750·GOTO 730
{GrBp} 760·LOCATE 10,20:PRINT 1:PRINT "RETURNING·T
O·BASIC"
{BiAs} 770·FOR·N=1·TO·1500:NEXT
{FqAr} 780·CLEAR·INPUT:CLS:NEW

```

Graffiti

For all you budding statisticians out there, Jeff Pollard, all the way from the land of watches and chocolate, Switzerland, has sent us this lovely graph generator. You input the figures, and let your Amstrad visualise the results for you. It is fairly self-explanatory, and allows input of any statistics you care to include.

```

{IlAq} 340·IF·h>100·THEN·GOTO 320
{CIAw} 350·IF·h<2·THEN·GOTO 320
{MoAs} 360·MODE 2:PRINT 1:j=1
{CgAo} 370·FOR·e=1·TO 5
{FoAv} 380·LOCATE 1,j,2:PRINT "X.....Y"
{DoAx} 390·LOCATE 1,j,3:PRINT "-----"
{PkAn} 400·j=j+16
{GmAk} 410·NEXT·e
{GgAm} 420·j=1:k=4
{KjAs} 430·FOR·d=1·TO·h:x(d)=d
{LmAu} 440·LOCATE 1,j,k:PRINT·x(d)
{CuAw} 450·LOCATE 1,j+4,k:INPUT·y(d)
{LvAu} 460·IF·d=1:THEN·ymax=y(d)
{BkAw} 470·IF·d=1:THEN·ymin=y(d)
{QqAu} 480·IF·y(d)>ymax·THEN·ymax=y(d)
{HvAx} 490·IF·y(d)<ymin·THEN·ymin=y(d)
{JnAu} 500·LOCATE 1,j+4,k:PRINT "."
{PkAl} 510·k=k+1
{LrBq} 520·IF·x(d)=20·THEN·j=17
{LrBq} 530·IF·x(d)=20·OR·x(d)=40·OR·x(d)=60·OR
·x(d)=80·THEN·k=4
{CwAw} 540·IF·x(d)=40·THEN·j=33
{FgAu} 550·IF·x(d)=60·THEN·j=49
{HgAv} 560·IF·x(d)=80·THEN·j=65
{JiAl} 570·NEXT·d
{KsBx} 580·LOCATE 31,25:PRINT "END·OF·DATA·INPU
T":FOR·m=1·TO·1000:NEXT·m:MODE 2
{S9B} 590·GOTO 100
{HmAp} 600·REM·draw·graph
{PsAl} 610·MODE 1
{CkAv} 620·bot=ymin:top=ymax
{JsCv} 630·PEN 1:PRINT "Y-ranges·from·":;PEN 2:P
RINT "ymin":PEN 1:PRINT "to·":;PEN 2:P
RINT "ymax":PEN 1
{BmEw} 640·LOCATE 1,j,5:PRINT "Do·you·want·to·sca
le·":;PEN 3:PRINT "·(1)":;PEN 1:PRINT "·Manu
ally";;P
EN 3:PRINT "(1)":;PEN 1:PRINT "(1)":;PEN 1
{IvAn} 650·IF·a$=INKEY$:
{CvAv} 660·IF·a$="":THEN·GOTO 650
{GrAv} 670·IF·a$="":THEN·GOTO 750
{CuAv} 680·IF·a$="":THEN·GOTO 700
{HuAl} 690·GOTO 650
{PgBk} 700·PEN 1:LOCATE 1,5:PRINT·SPACE$(120)
{NnCm} 710·LOCATE 1,5:PRINT "Input·Y·Scale·Bott
om·Value·":;PEN 3:INPUT·bot:PRINT 1
{PqCk} 720·LOCATE 1,7:PRINT "Input·Y·Scale·Top
Value·":;PEN 3:INPUT·top:PRINT 1
{CkUs} 730·IF·top<bot·THEN·LOCATE 1,24:PRINT 3:P
RINT "·TOP·VALUE·MUST·BE·GREATER·THAN·BOT
TOM!!":;PEN 1:GOTO 700
{CkAw} 740·IF·top>bot·THEN·GOTO 760
{Ater} 750·IF·ymin>ymax·THEN·MODE 1:PRINT 3:LOCAT
E 1,10:PRINT "AUTOMATIC·OPTION·DOES·NOT·F
UNCTION·WITH·CURRENT·DATA!":;FOR·m=1·TO·2000:NEXT·m:GOTO 600
{PnAv} 760·MODE 1:GRAPHICS·PEN 2:PRINT 3
{InAl} 770·PLOT 100,20
{C1Ap} 780·DRAW 90,20
{NgAo} 790·DRAW 600,20
{KxAm} 800·MOVE 100,20
{Ctar} 810·DRAW 100,399
{QwAp} 820·DRAW 90,399
{HuAt} 830·LOCATE 1,j,1:PRINT·top
{CkAw} 840·LOCATE 1,24:PRINT·bot
{CsAw} 850·LOCATE 3,11:PRINT 2:PRINT "1":LOCATE
11,5:PRINT "2":LOCATE 11,6:PRINT "3":LOCATE
11,7:PRINT "4":LOCATE 11,8:PRINT "5"
{CmFk} 860·PEN 1:LOCATE 14,4:PRINT "Enter·Data":;
LOCATE 14,5:PRINT "Draw·Graph":LOCATE 14
,6:PRINT "Save·Data":LOCATE 14,7:PRINT "Loa
d·Data":LOCATE 14,8:PRINT "List/Edit/Add
·Data"
{LuCo} 870·GRAPHICS·PEN 2:PRINT 3
,360:DRAW 515,265:DRAW 135,265:DRAW 135,
360
{JuBm} 880·LOCATE 11,12:PRINT "Enter·menu·selec
tion"
{PwAm} 890·a$="12345"
{MvBp} 900·b$=UPPER$(INKEY$):IF·b$=""·THEN·GOTO
,200
{KvAg} 910·IF·INSTR(a$,b$)
{PxBi} 920·ON·x:GOTO 240,600,1020,1150,1280
{NvCi} 930·LOCATE 11,12:PRINT "Please·press·1·t
o·5":FOR·q=1·TO·500:NEXT:GOTO 100
{J1Ap} 940·REM·enter·data
{L1Av} 950·IF·d=1:THEN·GOTO 320
{Aidx} 960·LOCATE 4,15:PRINT "You·will·lose·you
r·existing·data·":;LOCATE 4,17:PRINT "Are·
you·sure·you·want·to·?":;PEN 3:PRINT "Y/N
":;PEN 1
{BiAo} 970·z$=INKEY$:
{CwAv} 980·IF·z$="":THEN·GOTO 270
{KpAv} 990·IF·z$="y":THEN·GOTO 110
{GsAx} 1000·IF·z$="y":THEN·GOTO 320
{AuAn} 1010·GOTO 270
{ArAm} 1020·MODE 2
{HqBq} 1030·INPUT "How·many·points·do·you·wish·to
"

```

Get it right!

Typing in programs can be a pretty frustrating affair, since every missed comma, every mis-spelt instruction, can potentially stop the program working. To help you type in the listings properly, we do two things.

1. We replace all the spaces in the programs with dots, to make them easier to see (and count!)
2. At the start of each line is a special code (inside those squiggly brackets). On the coverpage this month is a special program called Type-righter which will show you these codes on-screen as you type in the programs on these pages. If you type the line incorrectly, the code on your screen will be different to the one in the magazine. Full instructions on how to use Type-righter are on the coverpage at the front of the magazine. We also print the program periodically in Type-ins (we did last month).

● You don't type these codes in – they're there purely for checking purposes. If you don't have a copy of Type-righter, or you're not using it, simply ignore them.

```

{PpAv} 880·LOCATE 35,25:PRINT·x(d-1)
{QqB1} 890·LOCATE 25,25:PEN 2:PRINT "X":CHR$(24
,3)
{NxAl} 900·PLOT 100,20
{GrAv} 910·FOR·v=1·TO·d-1
{AuBm} 920·a=100+((x(v)*500)/(d-2))-((x(1)*500)/(d-2))
{DxAv} 930·IF·x(v)=0·THEN·d=v..
{CsAx} 940·b=20+((y(v)-bot)*379)/(top-bot)
{KvAl} 950·p=b\1
{BuAm} 960·q=a\1
{FnAm} 970·DRAW·q,p
{IxAg} 980·GRAPHICS·PEN 1
{DoAl} 990·NEXT·v
{JiAp} 1000·CALL &BB18
{JiAm} 1010·GOTO 100
{HuAp} 1020·REM·save·data
{BoCs} 1030·MODE 1:PRINT 1,"...Press·[A]·To·Add·Data
,,[E]·To·Edit·Data,,or·[M]·To·Return·t
o·Menu"
{AmBk} 1040·n$=INKEY$:IF·n$=""·THEN·GOTO 1490
{HjAk} 1050·IF·n$="a":THEN·GOTO 1540
{EsAw} 1060·IF·n$="e":THEN·GOTO 1760
{OnAw} 1070·IF·n$="m":THEN·GOTO 100
{BmAm} 1080·GOTO 1490
{BtC1} 1090·PRINT 1,·SPACE$(80):LOCATE 1,25,1:I
NPUT#1:How·many·values·to·be·added·";c
{C1Al} 1150·f=d
{CsAn} 1160·w=d+c-1
{EwAp} 1170·IF·w>101·THEN·GOTO 1600
{JiCp} 1180·PRINT 1,·SPACE$(80):LOCATE #1,20,1:I
PRINT 1,"You·can't·exceed·the·maximum·of
·100·values"
{JoBj} 1190·FOR·z=1·TO·1000:NEXT·z:GOTO 1540
{ApAq} 1200·FOR·d=f·TO·w
{LwAm} 1210·x=d
{C1Aq} 1220·LOCATE 1,j,k:PRINT·x(d)
{ChAv} 1230·LOCATE 1,j,k:INPUT·y(d)
{MrAp} 1240·IF·y(d)>ymax·THEN·ymax=y(d)
{CsAx} 1250·IF·y(d)<ymin·THEN·ymin=y(d)
{PtAv} 1260·LOCATE 1,j+4,k:PRINT "."
{OsAv} 1270·LOCATE 1,j+5,k+2:PRINT "."
{FuAm} 1280·k=k+1
{MrAp} 1290·IF·x(d)=20·THEN·j=17
{CjBr} 1300·i=d
{JwC1} 1310·FOR·e=1·TO 5
{GnDj} 1320·PRINT 1,·SPACE$(80):LOCATE #1,7,1:I
NTH1,"X-";x(d);";Old·Y-";y(d);SPACE
$(30);INPUT#1,"New·Y";y(d)
{GvAm} 1340·d=i
{PvAv} 1350·ymax=y(1):ymin=y(1)
{CkAr} 1360·FOR·d=1·TO·d-1
{CxAv} 1370·IF·y(d)>ymax·THEN·ymax=y(d)
{MiAx} 1380·IF·y(d)<ymin·THEN·ymin=y(d)
{LoAm} 1390·NEXT·d
{BjAo} 1400·GOTO 1280

```

Have you written a crucial program that other readers of AA would find invaluable? We're always on the lookout for good quality listings of all kinds, whether they be utility, game or serious programs.

All submissions must be on 3 inch disk or cassette. A description of the program and how to operate it should be included, as well as any other information that you think will make our lives easier.

Smaller listings stand a greater chance of publication. After all, we only have a certain amount of space to work

with, and the smaller they are, the more we can print.

All submissions will be returned on the condition that an envelope marked with your name and address is included (or a sticky label - just as long as we don't have to write them out!).

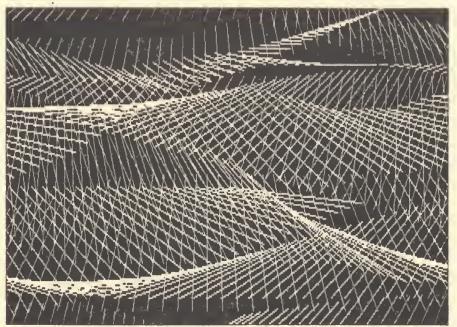
We offer a £20 cash prize* for each listing we print! So what are you waiting for? Get them sent in! Sent your entries to:

Type-Ins, Amstrad Action, Future Publishing, Beauford Court, 30 Monmouth Street, Bath BA1 2BW.

*As we can only make payments in Sterling, overseas winners will receive a substitute prize.

Waves

Waves, from Clive Jackson of Stamford, is an attractive, interesting and potentially useless graphical demo. Without giving too much away, this demo produces the illusion of both 3D and outrageously smooth scrolling, and has to be the perfect executive toy for the Amstrad owner. Type it in and see...



Not very useful, but attractive and interesting, and infinitely more so when you see this stuff moving. Considering the size of the listing, Waves is a nifty piece of work.

```

{FvCl} 10.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: IDENTIFICATION.
{FpCo} 20.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: PROGRAM-ID .WAVES .
{JxCr} 30.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: AUTHOR .CLIVE-JACKSON.
{LjCk} 40.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: STAMFORD.LINCS.
{KjBx} 50.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: 8080.CPU.
{DrCp} 60.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: DATE-WRITTEN .FEB/1991.
{L1Ck} 70.'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: AMSTRAD-ACTION.
{MqBx} 80.INK.0,0:INK.1,26:BORDER.10:MODE.2
{GwBw} 90.LOCATE.26,4:PRINT"Use-Numeric-Keypad"
      .'DISPLAY-USER-NOTES.
{BkBi} 100.LOCATE.27,6:PRINT"To-Move-Position"
{BwAv} 110.LOCATE.35,8:PRINTCHR$(240)
{DrBx} 120.LOCATE.34,9:PRINTCHR$(242);";CHR$ (243)
{OrAv} 130.LOCATE.35,10:PRINTCHR$(241)
{HwCj} 140.LOCATE.15,12:PRINT"Use-Keys-[f0]-or
      [.] To-Change-Line-Length"
{MsBs} 150.LOCATE.21,14:PRINT"Use-Spacebar-To-R
      e-run-Program"
{KnBs} 151.LOCATE.21,16:PRINT"Exit-Program-By-H
      itting-[ESC]"
{LjBs} 160.LOCATE.23,22:PRINT"[-HIT-ANY-KEY-WHE
      N-READY-]"
{FxRq} 170.CALL.&BB18
{BmBn} 180.CLEAR
      .'(W/K)-ALL-FIELDS-TO-ZERO.
{CpBr} 190.horizontal%:320;vertical%:200
      .'SET-PICT-CELL-CO-ORDINATES.
{CnAk} 200.DEG
{PnBx} 210.FOR-location%:&2D-TO-&34
      .'SET-PARAMETERS-FOR-PANNING.
{FrAp} 220.READ-value$
{N1Aq} 230.value%:VAL("&+value$")
{FvAr} 240.POKE.location%,value%
{LwAq} 250.NEXT location%
{DwBx} 260.DATA CC,0A,BC,23,23,C3,05,BC
{PbBn} 270.CLG
      .'CLEAR-SCREEN-GRAPHICS.
{NnBq} 280.WHILE.INKEV(47)<0
      .'DETECT-KEYBOARD-INPUT.
{L1Bs} 290.IF.INKEV(0)<
      1.THEN+vertical%:vertical%+4
      .'UP.
{JsBu} 300.IF.INKEV(2)<
      1.THEN+vertical%:vertical%+4
      .'DOWN.
{KqBw} 310.IF.INKEV(8)<
      1.THEN+horizontal%:horizontal%+4
      .'LEFT.
{PuBv} 320.IF.INKEV(1)<
      1.THEN+horizontal%:horizontal%+4
      .'RIGHT.
{AmBx} 330.IF.INKEV(15)<
      1.THEN.length%:length%+4
      .'LINE

```

```

{InBw} 340.IF.INKEY(7)<
      1.THEN.length%:length%+4
      .'LINE.
{MvBn} 350.angle%:angle%+2
      .'SHIFT-ANGLE.
{NsBq} 360.ORIGIN.horizontal%:vertical%
      .'FIND-SCREEN-POSITION.
{AxBv} 370.WHILE.length%:0:GOTO.280:WEND
      .'NO-ACTION-IF-NO-K/B-INPUT.
{PwCm} 380.DRAW.length%:COS(angle%);length%:SIN
      (angle%)
      .'SET-LINE-ON-SCREEN.
{BoAo} 390.CALL.&2D
{OmBm} 400.WEND
      .'[170]-CONDITION-ACCEPTED.
{JrBk} 410.horizontal%:320
      .'RESET-CO-ORDINATES.
{MoAo} 420.vertical%:200
{IvAw} 430.length%:0
      .'(H/K).
{FoAo} 440.angle%:0
{NmAx} 450.GOTO.270
      .'REPEAT-RUN.

```

Database

Wow! Big type-in this one, but well worth it. It comes from Jonathan Milne down in Devon. It's pretty comprehensive, too – below is a summary of the commands available.

- A. Create a file: allows entry of required No. of records, names and fields.
- B. Enter data: Enter your record
- C. Load a file: Load a previously saved file.
- D. Save current file: Saves present file, but takes a while.
- E. Catalogue: CATs tape or disc.
- F. Alter Record: Lets you amend mistakes.
- G. Delete a record: Takes a while, but deletes a chosen record.
- H. List current file: Lets you look through your records.
- I. Search the file: Enter a string and let the computer look for a match.
- J. Information page: Displays information regarding your records.
- K. Printout records: Produce hard copy of your records.
- L. Clear memory: Clears current file
- M. Exit program: Returns to Basic. So there you have it, the complete Database, it's hardly DBase 2 but still a competent system.

```

{KoAm} 10.'..DATA-BASE
{HuAu} 20.'..BY-JONATHAN.'ACE'.MILNE
{LlBx} 30.MODE.1:INK.1,0:INK.26:INK.3,14:BORD
      ER.26
{EwBn} 40.PEN.3:FOR.I=1..TO.1000:PRINT.CHR$(207)
      ;NEXT
{MpCi} 50.PEN.1:MOVE.0,0:DRAW.0,399,1:DRAW.639,
      399,1:DRAW.639,0,1:DRAW.0,0,1
{FvCi} 60.LOCATE.11,2:PRINT.CHR$(135);:FOR.I=1..TO.18:PRINT.CHR$(216);:NEXT
{ItCk} 70.PRINT.CHR$(139):LOCATE.11,3:PRINT.CHR
      $(219):LOCATE.30,3:PRINT.CHR$(217)
{JrCj} 80.LOCATE.11,4:PRINT.CHR$(141);:FOR.I=1..TO.18:PRINT.CHR$(218);:NEXT
{G1B1} 90.PRINT.CHR$(142):WINDOW.1,12,29,3,C
      L$M1
{DvBw} 100.LOCATE.2,6:PRINT.CHR$(135);:FOR.I=1..TO.36:PRINT.CHR$(216);:NEXT
{JmAp} 110.PRINT.CHR$(139):FOR.I=7..TO.23:LOCATE
      2,I:PRINT.CHR$(219);:SPACES(36)
{EvBx} 120.PRINT.CHR$(217);:NEXT:LOCATE.2,24:PR
      INT.CHR$(141);:FOR.I=1..TO.36
{LsBu} 130.PRINT.CHR$(218);:NEXT:PRINT.CHR$(142)
      ;WINDOW.3,38,7,23
{NpAt} 140.X=1;J=1:FILE#="NEW-FILE"
{F1B1} 150.CLS#1:CLS:PRINT.#1,"DATABASE-MAIN.ME
      NU"
{N1Bj} 160.PRINT.TAB(8)"A...Create-a-file"...
{PwBj} 170.PRINT.TAB(8)"B...Enter-data"...
{LjAx} 180.PRINT.TAB(8)"C...Load-a-file"...

```

```

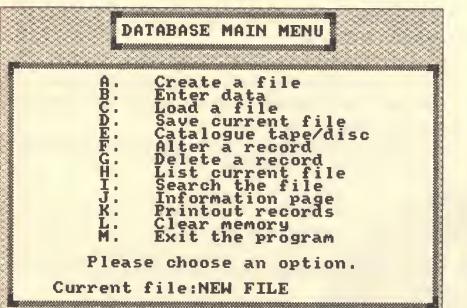
{LuBk} 190.PRINT.TAB(8)"D...Save-current-file"
      ...
{AuBn} 200.PRINT.TAB(8)"E...Catalogue-tape/di
      sc"
{MjBj} 210.PRINT.TAB(8)"F...Alter-a-record"...
{AuBm} 220.PRINT.TAB(8)"G...Delete-a-record"...
{BxBl} 230.PRINT.TAB(8)"H...List-current-file"
{IiBj} 240.PRINT.TAB(8)"I...Search-the-file"...
{DkBj} 250.PRINT.TAB(8)"J...Information-page"...
{MnBj} 260.PRINT.TAB(8)"K...Printout-records"...
{OxAx} 270.PRINT.TAB(8)"L...Clear-memory"...
{KxBn} 280.LOCATE.8,13:PRINT."M...Exit-the-pro
      gram"...
{OjBp} 290.LOCATE.7,15:PRINT."Please-choose-an
      option"...
{BuBq} 300.LOCATE.4,17:PRINT."Current-file:";LE
      FT$(FILE#,16)
{HtBq} 310.IF.UPPER$(INKEY$):IF.A$=""THEN.310
{JkBj} 320.Q=ASC(A$)-64:IF.Q<1.0R.Q>13:THEN.GOTO.310..
{KoCl} 330.ON.Q:GOSUB.350,470,640,780,950,1380,
      1650,1900,1990,2100,1280,1330
{LqAm} 340.GOTO.310
{EuBj} 350.CLS:CLS#1:PRINT.#1,"..CREATE-A-FILE
      "...
{GnFk} 360.IF.Z>0:THEN:PRINT."A-file-has-alread
      y-been-created.If-you-wish-to-create-a-.
      new-file-then-clear-then-memory(option-L)and-then-try-again.";CALL.&BB18:GOTO.1
      50...
{BsAt} 370.INPUT."Name-of-file":FILE#
{AxBn} 380.INPUT."Number-of-records":I-
      255";RECNUM%...
{IvBp} 390.IF.RECNUM%<1.0R.RECNUM%>255:THEN.GOT
      O.380
{BrBj} 400.INPUT."Number-of-fields":I-
      10";FINUM%...
{PmBj} 410.IF.FINUM%<1.0R.FINUM%>10:THEN.GOTO.4
      00
{ArBj} 420.DIM.INFO$(FINUM%*RECNUM%),FIELD$(FIN
      UM%)
{PrAu} 430.PRINT:FOR.I=1..TO.FINUM%...
{GxAv} 440.PRINT."Name-of-field":I...
{CvAv} 450.INPUT."";FIELD$(I)...
{NtBw} 460.NEXT:Z=1:PRINT:PRINT."Press-any-key.
      ";CALL.&BB18:GOTO.150...
{HoBk} 470.CLS:CLS#1:PRINT.#1,"..ENTER-DATA"
{LmAv} 480.IF.Z=0:THEN.GOTO.2210
{E1Ep} 490.IF.J-
      1=RECNUM%:THEN:PRINT."The-database-has-reached-its-maximumcapacity.Press-any-key-to-return-to-the-main-menu.":CALL.&BB18:GOTO.150...
{KpAq} 500.FOR.J=0..TO.RECNUM%...
{JpAv} 510.PRINT."Record-number";J
{FjBj} 520.PRINT:PRINT:FOR.F=1..TO.FINUM%...
{IoBk} 530.PRINT.LEFT$(FIELD$(F),10);TAB(11);
{HsAs} 540.INPUT."";INFO$(X)...
{ChBj} 560.PRINT:PRINT:PRINT."Press-N-for-next-.
      or-M-for-menu"...
{H1Ao} 570.IF.A$=INKEY$...
{QqAw} 580.IF.A$=""THEN.GOTO.570
{FtBj} 590.IF.UPPER$(A$)="N":THEN.GOTO.620
{IsBm} 600.IF.UPPER$(A$)="M":THEN.J=J+1:GOTO.15
      0
{MsAl} 610.GOTO.570
{BrBj} 620.CLS:NEXT.Z...
{K1Dj} 630.PRINT."The-database-is-now-full.Press-any-key-to-return-to-the-main-menu.":CALL.&BB18:GOTO.150...
{JrCj} 640.CLS:NEXT.Z...
{G1B1} 650.CLS#1:CLS:PRINT.#1,"..LOAD-A-FILE"...
{AvBj} 660.INPUT."File-name":FILE#
{MnAt} 670.OPENIN.LEFT$(FILE#,16)...
{KpAx} 680.INPUT.#9,RECNUM%,FINUM%,Z,X,J,FILE$...
{EwBq} 690.DIM.INFO$(RECNUM%*FINUM%),FIELD$(FIN
      UM%)
{MsAq} 700.FOR.I=1..TO.FINUM%
{JiAs} 710.INPUT.#9,FIELD$(I)...
{ImAk} 720.NEXT
{DvBj} 730.FOR.I=1..TO.RECNUM%*FINUM%...
{LpBq} 740.INPUT.#9,INFO$(I)...
{KuAk} 750.NEXT
{OwBj} 760.CLOSEIN
{NtCj} 770.PRINT:PRINT:PRINT."Loaded.Press-any-key.";CALL.&BB18:GOTO.150...

```

```

{ExBm} 780.CLS:#1:CLS:PRINT.#1,"..CLEAR-MEMOR
      Y".
{AvBx} 790.IF.Z=0:THEN.GOTO.2210
{KuAu} 800.INPUT."File-name":FILE#
{MjAt} 810.INPUT."Speed-write":SP%
{LkBj} 820.IF.SP%<0.0R.SP%>1:THEN.GOTO.810
{DkAq} 830.SPEED-WRITE:SP%
{FjAp} 840.PRINT:PRINT
{OwAt} 850.OPENOUT.LEFT$(FILE#,16)
{NmAx} 860.PRINT.#9,RECNUM%,FINUM%,Z,X,J,FILE$...
{CsAq} 870.FOR.I=1..TO.FINUM%...
{BqAt} 880.PRINT.#9,FIELD$(I)...
{HoAk} 890.NEXT
{HpAu} 900.FOR.I=1..TO.RECNUM%*FINUM%...
{BsAr} 910.PRINT.#9,INFO$(I)...
{KsAk} 920.NEXT
{NxAk} 930.CLOSEOUT
{FjCk} 940.PRINT:PRINT:PRINT."Saved.Press-any-key.";CALL.&BB18:GOTO.150...
{DjBk} 950.CLS#1:CLS:PRINT.#1,"..CATALOGUE"...
{EiAw} 960.INPUT."Tape-or-Disc":TD...
{Aidr} 970.IF.UPPER$(LEFT$(TD$,1))="D":THEN.IDI
      R:PRINT."Press-any-key-to-return-to-the-.
      menu.":CALL.&BB18:GOTO.150
{HtBq} 980.IF.UPPER$(LEFT$(TD$,1))="T":THEN.PRI
      NT."Press-escape-then-any-key-to-return-to-the-.
      menu.":PRINT:PRINT:CAT:GOTO.150...
{BuDw} 990.GOTO.950
{ImBo} 1000.Y=1:CLS#1:CLS:PRINT.#1,"LIST-CURREN
      T-FILE";;

```



Database could prove an invaluable tool, even if you only use it as a glorified address book. A big type-in, but you have the patience don't you?

```

{LsAv} 1010.IF.Z=0:THEN.GOTO.2210
{OiAu} 1020.INPUT."Start-from-record":H...
{NuAq} 1030.Y!=#FINUM%:FINUM%+1
{MxBm} 1040.IF.H<1.0R.H>RECNUM%:THEN.CLS:GOTO.1
      020
{JuAk} 1050.CLS
{DrAs} 1060.FOR.Z=H..TO.RECNUM%
{MmAv} 1070.PRINT."Record-number";Z
{AmBi} 1080.PRINT:PRINT:FOR.G=1..TO.FINUM%...
{HiBq} 1090.PRINT.LEFT$(FIELD$(G),10);TAB(11);"
      ;INFO$(Y)...
{IkAq} 1100.Y=1:NEXT.G
{GwBj} 1110.PRINT:PRINT:PRINT."Press-N-for-next-.
      or-M-for-menu"...
{JvAp} 1120.IF.A$=INKEY$...
{IrBj} 1130.IF.A$=""THEN.GOTO.1120
{B1Bm} 1140.IF.UPPER$(A$)="N":THEN.GOTO.1170
{NmBk} 1150.IF.UPPER$(A$)="M":THEN.GOTO.150
{MuAm} 1160.GOTO.1120
{FvAp} 1170.CLS:NEXT.Z
{NqDj} 1180.PRINT."You-have-come-to-the-end-of-.
      your..file.Press-any-key-to-return-to-the-.
      main-menu.":CALL.&BB18:GOTO.150...
{OuBj} 1190.CLS#1:CLS:PRINT.#1,"..INFORMATION-P
      AGE"...
{EvAw} 1200.IF.Z=0:THEN.GOTO.2210
{OmBj} 1210.PRINT."Name-of-file":LEFT$(FILE$,1
      6)...
{G1Bn} 1220.PRINT."Speed-write":SP%...
{ErBj} 1230.PRINT."Total-number-of-records":RE
      CNUM%...
{CqBj} 1240.PRINT."Number-of-records-used":J-
      1...
{LwBr} 1250.PRINT."Number-of-records-unused":R
      ECNUM%-(J-1)...
{KuAk} 1260.PRINT."Number-of-fields":FINUM%...
{JvBj} 1270.PRINT:PRINT:PRINT."Press-any-key.";CALL
      .&BB18:GOTO.150...
{PwAv} 1280.IF.Z=0:THEN.GOTO.2210

```

```

{GtBn} 1280.CLS:CLS#1:PRINT.#1,"..CLEAR-MEMOR
      Y".
{AvBx} 1290.INPUT."Are-you-sure-you-want-to-cle
      ar-the..memory.":YN$
{BoDm} 1300.IF.UPPER$(YN$)="N":OR.UPPER$(YN$)=
      "NO":THEN:PRINT:PRINT."Press-any-key.":CA
      LL.&BB18:GOTO.150
{EsBw} 1310.IF.UPPER$(YN$)="Y":OR.UPPER$(YN$)=
      "YES":THEN.RUN.140
{GiAs} 1320.PRINT:PRINT:GOTO.1290
{NmBj} 1330.CLS:CLS#1:PRINT.#1,"..EXIT-THE-PROG
      RAM"...
{FwCj} 1340.INPUT."Are-you-sure-you-want-to-exi
      t-from-the-program.":YN$...
{JrDm} 1350.IF.UPPER$(YN$)="N":OR.UPPER$(YN$)=
      "NO":THEN:PRINT:PRINT."Press-any-key.":CA
      LL.&BB18:GOTO.150
{FxBw} 1360.IF.UPPER$(YN$)="Y":OR.UPPER$(YN$)=
      "YES":THEN.IBASIC
{JmAk} 1370.PRINT:PRINT:GOTO.1340
{EqBm} 1380.R=1:CLS:CLS#1:PRINT.#1,"..ALTER-A-R
      ECORD"...
{FwAw} 1390.IF.Z=0:THEN.GOTO.2210
{IwAt} 1400.INPUT."Start-from-record":P
{PkBn} 1410.IF.P<1.0R.P>RECNUM%:THEN.CLS:GOTO.1
      400
{OrAr} 1420.R=P*FINUM%:FINUM%+1
{JsAk} 1430.CLS
{DvAs} 1440.FOR.C=P..TO.RECNUM%...
{BmAw} 1450.PRINT."Record-number";C
{LwAx} 1460.PRINT:PRINT:FOR.S=1..TO.FINUM%...
{BiBr} 1470.PRINT.LEFT$(FIELD$(S),10);TAB(11);"
      ;INFO$(R)...
{LtAp} 1480.R=R+1:NEXT.S
{CrBt} 1490.PRINT:PRINT:PRINT."Press-A-to-alter
      -or-N-for-M"...
{InAu} 1500.PRINT."or-M-for-menu"...
{OsAq} 1510.IF.A$=INKEY$...
{CtBj} 1520.IF.A$=""THEN.GOTO.1510
{FiBj} 1530.IF.UPPER$(A$)="N":THEN.GOTO.1570
{DrBj} 1540.IF.UPPER$(A$)="M":THEN.GOTO.150
{NtBm} 1550.IF.UPPER$(A$)="A":THEN.GOTO.1590
{LjBj} 1560.GOTO.1510
{CoAp} 1570.CLS:NEXT.C
{GiDp} 1580.PRINT."You-have-come-to-the-end-of-.
      your..file.Press-any-key-to-return-to-the-.
      main-menu.":CALL.&BB18:GOTO.150...
{PfBr} 1590.O=0:Q*FINUM%:FINUM%+1
{CrBx} 2200.PRINT:PRINT."Printed.Press-any-key.
      ";CALL.&BB18:GOTO.250
{HiEm} 2210.PRINT."A-file-must-first-be-created
      -(optionA).This-will-allow-you-to-enter-.
      the-number-of-records-and-the-fields-you-.
      want.":CALL.&BB18:GOTO.140
{ByMad} 2220.MAD-MAC.1991.**
{MrBj} 40.REM.*****

```

All your own work?

Make sure that the listings you submit to Amstrad Action are your own work! Don't send us 'modified' listings, based on someone else's program.

For instance, a listing in published last month (AA65) originally appeared in AA42. The original author wrote to us, exposing the the fraud. Why, he wonders, do we not check the listings more thoroughly? Well, David, issue 42 is over two years old, we've had a complete turnaround in staff in that time, and besides, it's impossible for any of us to remember that far back!

However, if you should notice about any blatant copies that appear in these pages then we'll take the appropriate action... Payment will be withheld from any programs printed that are not your original work. You have been warned!

HELP LINE

Feeling helpful? Just send your name, address, phone number (say if you don't want it printed) and subjects on which you're offering help to: **Helpline, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2AP**. Please write on a postcard or the back of a stuck down envelope and keep it short or you won't get in (or you'll get cut to 'loadsagames').

If you want help contact the appropriate Helpline - not us. By post include a self-addressed, stamped envelope for the reply - or you won't get one. And phone only in decent hours!

Piracy is not welcome: don't try it, you'll get booted off. Keep it legal. And if you receive SAE's, for heaven's sake return them with some acknowledgement. Finally, if you want to come off Helpline just write in and say so.

● Due to the huge response for the Helpline page, we're having to cut down on the size of individual entries. So from now on, please quote only your first name and a phone no. That way, you'll be more likely to get in...

Hi! I'm 17 years old, male, and looking for a female penpal, 16-19 years old. Please enclose photo and SAE, P.S. I own a CPC 464.

Brian Kerr, 37 Rosefield Rd, Troqueer, Dumfries, Scotland, DG2 7EZ

Free broken printer! Amstrad DMP 2000 stopped printing: one line of dots. If you would like it for parts/reconditioning, also old AAs, some with cover cassettes, free if collected.

Moira, 0962 861123

Female penpal wanted, 15+. I own an Amstrad CPC6128, all letters replied.

Neil Read, Barter Spinn, Sandy Lane, Kingswood, Surrey KT20 6NQ

Penpal wanted, 13-16, male or female, to be able to lend or swap games. Also help wanted to defeat Drax at the end of *Barbarian*.

Kenneth Ramsbottom, 7 Harris Ave, Davyhulme, Urmston, Manchester M31 2FT

I am attempting to set up a PD library. All advice, software etc, very welcome.

Ben Banfield (0732 353726) The Oast House, Forest Farm, Castle Hill, Tonbridge, Kent, TN11 0ND

Help! I can't get past level 2 of *Switchblade* (cartridge). Ben Garside, 18 Bassett Crescent West, Bassett, Southampton, Hampshire, SO1 7DZ. Tel: 0732 790502

Wanted: *Return Of The Jedi* on disk, will swap for *Out Run*, *GI Hero*, *Tournament of Death* & *Road Blaster* on tape. Also wanted, the password for *Bubble Bobble*. D. Grendan 40 Burman Road, Shirley, Solihull, West Midlands, B90 2BG. Tel: 021 744 5368

Wanted, *DBase II* for the 6128, any information in tracking down this program gratefully received. J. Harrison, 10 Carroll Dr, Wistaston, Crewe, CW2 8DH. Tel: 0270 662772

Wanted for less than £3.00, *Arkanoid*, *Arkanoid 2 - The Revenge of Doh*, *R-Type*, *X-Out* and *Hunter's Moon* (all tape). Mr R. Pemberton, Concord Ward, Rampton Hospital, East Retford, Notts. DN22 0PD

Pen Pal wanted to swap machine code tips and programs. TAS, 71 Maryport Close, Blackburn, Lancashire, BB2 3UQ

Help needed on *Batman - The Movie* (maps, pokes, anything!!) Help given on *Dizzy 1, 2, 3*, *Quattro Power*. Penpal wanted, 11-13 male or female. Must have 464 and want to lend games. Send S.A.E. please!! Daniel Holbrook, 161 Poulton Royd Drive, Spital, Wirral, Merseyside L63 9YP

I have back issues 21, 29, 31, 37-63 of AA, and I also have over 2,000 pokes. Lastly, does anyone have any American Football games, especially *Head Coach*, that they are willing to swap for pokes, back issues, or part with for a sensible price? All games must be on disk.

Mark Lewis, 33 Pennington Place, Southborough, Tunbridge Wells, Kent. TN4 0AQ. Tel: 0892 544282

Help! I need a 464 manual and Amstrad SSA1 speech manual, please!!

S.R. Hurst, 8 Restormel Road, Barbican, East Looe, Looe, Cornwall, PL13 1EJ

Help needed in *Dragons of Flame*. I am stuck in Sla-Mori. Also, penpals wanted, male or female, aged 14+. I have a CPC 464. Neale Pollard, 24 Maiton Court, Upper Malone Road, Belfast BT9 6HE

Penpals wanted aged 11-15. Must have 464. I don't want to swap games. I do have cheats on *Batman* and *Italy 1990*.

Ryan Tallent, 15 Rutland Close, Kippax, Leeds LS25 7JH

Wanted - a copy of *AA52* complete with covertape - which can be returned if required after transferring to disk.

Graham Talbott, 7 Teal Drive, Brookdale Village, Birmingham B23 7YA

Pokes, cheats on *Batman - Movie*, *Chase HQ* and *Strider*. P.S. Any printers for sale 464-compatible? Must be under £100.

Michael Cheetham, 47 Heath Street, Stowbridge, West Mids DY8 1SE

A cry for help! Has anyone got the passwords to levels two & three of the Hit Squad's *Vindicto*? If you do, do me a favour and drop me a line.

Paul Foster, 31 Meadowfield Road, Stocksfield, Northumberland NE43 7PY

Can anyone sell me GAC graphic adventure creator on tape? Also any hints, tips etc. for *Elite* would be welcome.

David Page, 5 Torrington Lane, East Barkwith, Lincoln, Lincs LN3 5RY

Help wanted on *Ghosts 'n' Goblins*, also, AAs for sale - nos 44, 47, 48, 50, 51. Zac Taylor, 11 Tabernacle Road, Hanham, Bristol BS15 3DZ

Help given on loadsagames. Send a list and an SAE. Iain McKinnon, 37 Loch Laidon St, Sandyhills, Glasgow, G32 9HR

1,000 Multiface pokes for over 700 games. Advice given on BASIC and LOGO. Send an SAE TO: A.W. Banks, Tickey Wood, Crapstone, Yelverton, Devon, PL 20 7PW

Anyone out there got *Robin Smith Int. Cricket* and *Test Master*? Willing to swap - have large selection to choose from. Steven Walsh, 1c Hertford Road, Hollingdean, Brighton, BN1 7GG

12 year old male, seeks penpal interested in adventures and serious software. Help offered on *Ingrids Back*.

Robert Melody, 30 Highfields Rd, Purley, Surrey, CR8 2JG, Call between 5-7pm on 081 668 8525.

Tape owner wants *Turrican* and *Rick Dangerous 2*. Swap for ALL of the following. *Hyper Sports*, *Nemesis*, *Xcel*, *3D Boxing*, *Ghostbusters*, *Activator*, *Winter Sports*, *Cyrus II Chess*, *Joe Blade 2*, *Bounder* and *Night Gunner* (all originals on tape).

S.Mahoney, 185 Portland Cres, Stanmore, Middx, HA7 1LR.

New to Amstrad 464, male, 19, would like female penpals (photo please). Over 200 games; for list and photo exchange send SAE. Lee Howes, 42 Grendon Close, Matchborough West, Redditch, Worcs B95 0EG

Hi! I'm a male of 14 years of age, looking for penpals from all countries. Please start scribbling. I await your letters! Male or female aged 13-20.

Guaranteed reply. I own an Amstrad 6128 with tape deck and games.

Songyow Ly, 8 Wooderson Close, Southnorwood, London SE25 6JP

Wanted, some kind of program in Basic that will arrange my Train Spotters numbers in dative and geographical order, e.g. DMU 4168; Haymarket 26th. Jan 1973 Also, does anyone have episode four of *Howard's Way* on VHS (first series)? Derek Rutherford, 9 Gardener's Cres, Edinburgh

Has anyone got *Risk* computer game on disk for the Amstrad CPC and, or wants to swap a game for *Subbuteo* on disk, also penpal wanted, 12-15, must have a disk drive. Male or female.

Stuart Mok, 300 Mitcham Rd, Croydon, 6CR 3JN

Help wanted on *Fighter Bomber*. Has anyone finished it?

Robin Windle, 4 Ealing Court, Newcastle-upon-Tyne, NE3 2YD

Totally stuck on *Ghosts 'n' Goblins*, *Ghouls 'n' Ghosts*, and *Strider*. Tips and swaps to:

R.J. McGovern, 20 Chesterfield Ave., Gt. Western Road, Kelvinvale, Glasgow, G12 0BL

Will Nick Hucker please contact Anthony Treacy as he has lost your address. Help wanted on *Wild Streets*. Anthony Treacy, 60 Ruskin Rd, Kingsthorpe, Northampton, NN2 7SY.

Help given on *Firebird's Elite*.

David Walters, 20 Richard Cooper St., Goole DN14 5HA.

CPC 464 owner would like help with AA type-ins, also wants to buy a Multiface 2.

Simon Topliffe "Bankside" Barnend Lane, Willmington, Dartford, Kent. Tel: 0332 222801

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Free for all

Caroline Lamb is our regular public domain columnist, taking her monthly look at the PD scene. This month: downloading free software from bulletin boards...

Comm and get it!

One good reason for going to all the trouble of buying a modem, an RS232 interface, some communications software and then getting yourself familiar with the world of 'comms' is that there is a lot of good public domain software out there just waiting for you - for only the cost of a phone-call.

Not only that, but you can usually contact the person that wrote the program in the first place, ask them if they have updated it recently (maybe even get a copy free) and suggest some improvements.

While you are sitting at your keyboard in splendid isolation, trying to work out how to solve a problem with a program and hoping that the next issue of AA will contain the answer, there is a global community of computer users just waiting to show you how they solved it four or five years ago.

Seriously! Most of the best PD programs on the UK scene today have initially been distributed down the telephone line.

And it doesn't have to cost you a fortune in phone bills. What you can do is plug in to a local

What is Shareware?

Shareware is slightly different to public domain software in that the copy of the program that you can have for 'free' is a demonstration, cut-down, sample, unsupported old version of the 'real' program. You are free to use this 'shareware' copy as much as you like but if you want a current version or some user support you have to send the author some extra money to 'register' your copy with them.

I think that shareware (especially CP/M type stuff) is a good idea because it gives programmers some incentive to keep on writing relatively cheap CP/M programs instead of heading off to the commercial IBM/MS-DOS sector to make some more 'serious' money.

Yet another advantage of 'registering' a shareware program is that you will receive ongoing user-support. This means that if a new version of the program or documentation is released you will be sent a copy (you'll have to provide the disk or at least the price of one).

BB that is a member of the FidoNet BB system. FidoNet is collection of BBs that are scattered across the world. They take mail and post it to other BBs all over the world. Not only do they take the messages, they also post the replies back (via the phone.) So entering 'the matrix' doesn't necessarily mean that you have to spend a fortune.

Peruse at your leisure

Talking about saving money on phone bills... I've got some good news for CP/M users this month. Those of you using an Amstrad for comms purposes will be pleased to hear you can now save cash by reading and replying to mail at your leisure offline.

Paul Martin has written a program called CP/M Read and Reply (CRR), which is an offline reader for scrolling bulletin boards. It allows you to download message packets from a conforming QBBS, RemoteAccess or Opus Fidonet BB and read them offline without running up your phone bill.

When in use the effect is exactly as if you are currently connected to the BB that you downloaded the packet from. You can view any one area of the BB that you normally receive messages from or even go through them all at once. If you want to reply to a message you simply press a key and CRR seamlessly loads in your favorite CP/M word processor and lets you get on with the job. If you want to quote text from the original message, all you have to do is press another key. When you've finished writing, CRR switches out your WP (VDE in my case), gives the reply a unique code number and compresses it into a package which will eventually be uploaded to the BB.

At the end of all your replies, CRR picks up all the individual replies and crams them into a single file ready for you to upload. When the BB receives your bundle of replies it automatically unpacks them and then sticks them in the appropriate message areas.

Where can I get it?

CRR is a shareware program. You can obtain a copy from all good CP/M PD libraries (try ringing around a few featured in the 'Where to go' box. I do know that WACCI has the latest version of the program), or if you have a modem, try your local FidoNet system. Otherwise, write to Paul

WHERE TO GO

• The CP/M User Group, 72 Mill Lane, Hawley, Dartford DA2 7RZ. The best CP/M user group in the UK and they have lots and lots of quality PD. Bung them a few quid for a copy of the latest newsletter.

• DW Software, 62 Lascelles Avenue, Withernsea, North Humberside HU19 2EB. DW is the source of the marvelous WIMP environment desktop reviewed last month, as well as an gargantuan grab bag of other quality programs. Six clams will get you a PD disk bulging with software.

• Penguin Software Library, Ruxley House, 28 Mount Hermon Road, Woking, Surrey, GU22 7UH (0483 763223).

This is a new library run by Dave Carter which has managed to gather together a very impressive list of PD programs from various sources including some programs that Dave has written himself. If you want to p p p pick up a p p p penguin disk phone Dave on and ask him to send you a copy of his one page newsletter. Each Penguin disk costs 50p for a single side and £1 for two sides. If you want Penguin to supply the disk, then bung on another £3 for every disk you order.

• The Public Domain Software Library, Winscombe House, Beacon Road, Crowborough, Sussex TN6 1UL, Tel: 0892 663298. Send SAE for free CP/M catalogue.

The Pussycat Bulletin Board (V21, V22, V22bis and V23) on 061 236 0351 available 24hrs a day, is a new bulletin board which deals specifically with matters CPC, CP/M and PCW. There's loads of downloads available and no registration fee required (can't be bad!).

• Robot PD Library, 2 Trent Road, Oakham, Rutland, LE15 6HF. Robot has mostly Amstrad programs which

include a good range of demos, games and utilities in its list. Send 45p, a blank formatted disk and a SAE for some sample programs or if you one of those retiring cautious types who consider the idea of sending 45p off to an unknown address absolutely outrageous, you can simply send an SAE for a free catalogue. Cassettes are also available, once again send an SAE for a free catalogue.

• Scull PD Library. A new library run by Alan Scull up in sunny Glasgow. Software is available on both cassette and disk, and although the library's pretty new, there's already an impressive catalogue of wares. Two cassettes full will set you back 50p + stamped SAE + blank

cassettes, £1 + stamped SAE + blank disk will get you two sides of software. Write to Scull PD Library, 9 Barra Wynd, Broomlands, Irvine KA1 1DB.

• TUG II 0905 775191 V21/22/22bis/23 8N1. A bulletin board with a lively CPC section and a large amount of downloadable code. The board operates for 23 hours a day (what's this guy doing for the other hour?), so you should be able to make contact.

• WACCI UK, 9 South Close, Twickenham TW2 5JE. Telephone 01 898 1090. As well as being a public domain library, WACCI is a fanzine of truly singular quality. Bung a quid and a half to 9 South Close and you'll receive a sample issue with the PD lists contained therein.

Deserted Island Disks

This month I'm looking at another of my original choices, VDE. The abbreviation stands for Video Display Editor and the program is a small, fast but powerful word processor which features:

- full-screen editing
- wordwrap and reformat
- margins, tabs, spacing
- many print features
- block operations
- macro programs
- find and replace facility
- undeletion
- user area support
- disk file operations
- WordStar compatibility
- configurable options

OK, I admit that VDE is not quite up to the standard of Protext on ROM, but remember we are talking public domain here. That means it is a fraction of the cost. In comparison to some commercial programs (that can cost up to ten times as much!), VDE is the bee's knees.

In operation

VDE is versatile. Its pure ASCII mode and definable macros make it an ideal programmer's editor; its full formatting and printing features also make it a good word processor.

In addition, VDE is fast. It is written in Z80 assembler and it has no disk overlays so it edits entirely in memory. Speed is a factor that more cumbersome "full-featured" programs overlook. Finding a string near the end of a 50K file takes WordStar 3.3 about 14 seconds (8MHz Z80) - VDE does it in under a second.

This is like moving through air instead of molasses: you will find that you can do more of your work on screen, and less on paper.

Better than Protext?

No way... well, perhaps... get a ROMBO ROMBox, plug it into the back of your Amstrad insert in the ROM versions of Protext, Promerge+, Prospell and UTOPIA and you have the ultimate word processing machine. Having said that, it'll cost you quite a bit. At a fraction of the cost, and purely as a word processor, VDE has a few advantages:

For example, VDE automatically recognises the Dktronics Silicon Disc and 256K memory expansion, a feat which means you have access to a 444K C: drive.

In addition, text files can be 50-54k in size (50k is the optimum size) compared to Protext's maximum 34-36k-ish file size.

Thanks to CP/M's ability to deal with 15 external disk drives, dealing with a 3.5-inch 'Jumbo' disk is kid's stuff.

Don't get me wrong, I love Protext dearly, but if Protext wasn't available then VDE would be the one for me.

Quibbles

They really are only minor ones. For a start, VDE boasts 'Wordstar compatibility' as a virtue, whereas I find having to use escape codes to perform functions, instead of having a nice command line, a pain. Having said that, some of my friends who are used to using Wordstar swear by escape codes. It's what you get used to, I suppose.

My second gripe is about the documentation - there is so much of it! Normally I moan about documentation being to brief, but this is too much of a good thing. Fortunately, it comes with a 'quick reference' guide which speeds things up enormously once you get started with the program.

The best of both worlds?

So you've got used to Protext but you are interested in dipping your toe into the world of VDE? But you don't want to have to learn a whole new set of commands in order to try it out?

No problems! Type in the following file and save it as PROFILE.SUB onto your VDE working disk:

palette 63 0!setkeys keys6128.vde

Now do the same with this listing and save it as KEYS6128.VDE on the same disk:

0 N	"↑K"	CURSOR UP
0 S	"↑W"	SCROLL BACK ONE LINE
0 C	"↑R"	SCROLL UP ONE SCREEN
1 N	"↑L"	CURSOR RIGHT
1 S	"↑F"	CURSOR RIGHT ONE WORD
1 C	"↑#85"	GOTO END OF LINE
2 N	"↑J"	CURSOR DOWN
2 S	"↑Z"	SCROLL FORWARD ONE LINE
2 C	"↑C"	SCROLL DOWN ONE SCREEN
8 N	"↑H"	CURSOR LEFT
8 S	"↑A"	CURSOR LEFT ONE WORD
8 C	"↑#84"	GOTO START OF LINE
16 N	"↑G"	DELETE TO END OF LINE
16 S	"↑T"	DELETE WORD RT OF CURSOR
16 C	"↑Y"	DELETE LINE
17 C	"↑#80"	GOTO TOP OF FILE
19 C	"↑#81"	GOTO BOTTOM OF FILE
58 C	"↑#82"	DELETE TO END OF LINE
62 C	"↑#83"	CENTRE LINE
66 N S C	"↑#27"	ESCAPE
E #80	"↑QR"	
E #81	"↑QC"	
E #82	"↑QY"	
E #83	"↑QC"	
E #84	"↑QTS"	
E #85	"↑QTD"	

Now when you boot up VDE on your working disk the keypresses will be exactly the same as you use with Protext - i.e. CNTRL f3 to CAT the disk, CNTRL E to clear to the end of the line, CNTRL [and CNTRL] to move to the top and bottom of the document etc. You'll instantly feel at home with it.

Martin direct for more information. You are allowed to use it for evaluation purposes for a month. After that time you should register it. The program is not crippled in any way if you don't register it with the author, but it would be appreciated by Paul Martin and the rest of us CP/M users if you did. If you want to register straight away then the registration fee is £15. It should be in the form of a banker's draft, UK postal order or a cheque drawn on a UK bank. Currency notes are sent at your own risk! The address to which you should send your registrations is: Paul Martin, 85 Hollin Lane, Middleton, Manchester M24 3FE.

• GET IN TOUCH

If you are running a Public Domain Library, write to me here at the Amstrad Action office and tell me all about it. If you want me to review some of your library's programs (think about the free publicity!) send them in on a 3-inch disk and I'll have a look. But if you want your disk returned, please scribble your name and the return address clearly on the disk label, not the case label (don't send me disk cases, they get lost.)

You don't have to be running a public domain library to get in touch. Anybody can write in and tell me about their experiences with PD programs, the libraries that supply them or the back-up service provided.

I'd be especially interested to hear from anyone who has written, or plans to, write a program for the Amstrad PD scene.

Baud silly

Just in case you are interested in logging onto some Bulletin Boards and downloading some software here are some numbers to dial.

NAME	NUMBER
Aspects	(061) 792-0260 *
Digital Info Exchange	(061) 434-9907 *
GOSH	(0257) 267186 +
Grenadier	(0825) 762803
Jolly Roger	(081) 742 1640
Infotel Ros	(0737) 766027
Look Northwest	(0282) 698380 *
Mektronics	(061) 773-7739 *
Merkin instead	(061) 434-7059 *
NWW Dungeon 13	(061) 873-8314 *
Pet Sounds	(0705) 252161
Pussycat	(061) 236-0351
Road Runner	(061) 483-4105 *
Seven Seas Opus	(061) 442-6758 *
The Gas Lamp	(0706) 358331 *
The Growling Grizzly	(0772) 828975 *
The Hyperion Project	(0689) 800007
The Music Studio	(061) 727-7164 *
The Pig Pen	(0706) 821837 *
The Sphinx	(061) 748 3855 *
The Stun User	(061) 429-9803 *
Time Tunnel	(0204) 596245 *
The Voyager	(061) 725-9580 *
Tug 2	(0905) 775191

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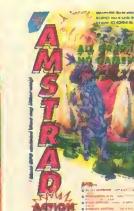
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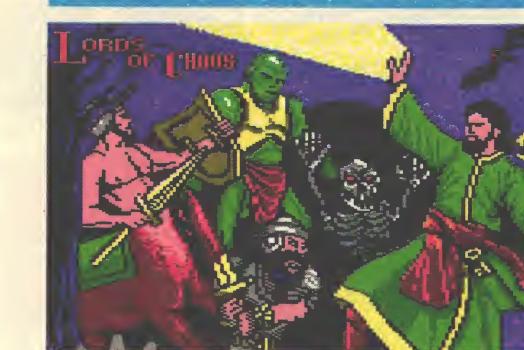
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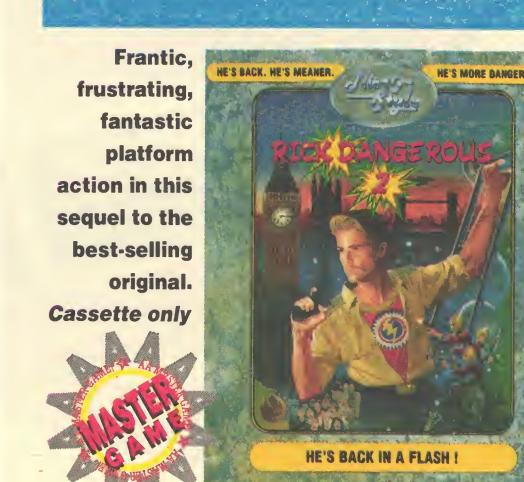
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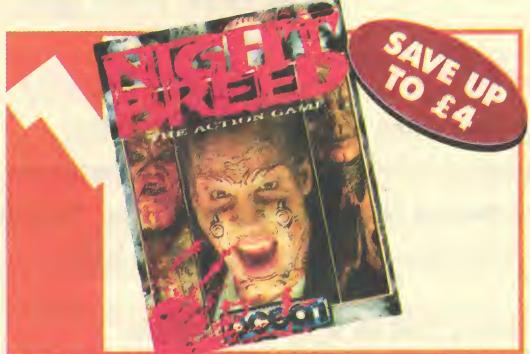
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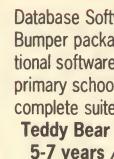
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Competition winners galore!

We had a look in our compo hats at the end of this issue and found that no fewer than four fantastic compos were due to be drawn. So, without further ado, here they are...

Chrimbo Compo

From the Xmas issue there's the little telly competition, where not only do three lucky winners get a brillo Casio hand-held TV, but 25 runners up each get a Codies T-shirt. Three cheers for Codemasters!

TVs: Wayne Rutter; Mark Warburton; Richard Young.

T-Shirts: Michelle Crowley; G Fry; Van Madsen; Bernard O'Leary; Graham Talbott; W Triggs; W Livingstone; Simon Cookson; Mark MacFarlen; Greg Bowie; Allan Leal; Craig McDonald; Filip Hoffman; L Clapham; Mark Shilton; Derek Conway; Jonathan Beck; Thomas Rastall; Henry Jenkins; David Goodship; K Lambert; A Henderson; Nicky Clark; Stuart Bailey; Jonathan Quimby.

Gazza Compo

Footie fans were given a real treat with our Gazza Compo from issue 66. Empire is giving five lucky winners a

pair of footie boots, a season ticket to the club of their choice and... wait for it... a football signed by the great man himself! (No, Gazza, not Rod.)

Gazza winners: R. Sutton; Lee Pears; Patricia Brown; Alistair Holpern; A Blenkinsop.

HeroQuest

The Grapevine section of the magazine had a few pressies to give away too. Gremlin is awarding five of you with the popular MB boardgame HeroQuest.

HeroQuest: Lee Pears; Debbie Blackmore; P. Madders; Brian Thornton; Paul Montgomery.

I need one of them bags for my bum

If you're always at a loss for where to put things then you'd be rather chuffed to be receiving a US Gold ESWAT bum bag. In fact, ten of you will be, thanks to our US Gold bum bag competition.

Bum Bags: Danny Davenhill; James Taylor; Sam Ho; P Andrews; W Myles; Paul Pippard; David Page; Richard Whelan; Brian Evans; Craig Cooper.

Well done all 48 of you! Oh, and thanks to Jackie for helping pick the entries from the AA top hats.

NEXT MONTH...

- We thought *Switchblade* was brilliant on the console – but how does it translate to cassette/ disk form?
- Want to produce your own magazine? We present a step-by-step guide to design and layout.
- At last we've got our sticky maulers on console versions of *Tintin on the Moon* and *Klax*. Will they blow your mind? (Or just your wallet?)
- On the covertape... another wad of corking demos, brilliant full games and dead useful utilities. What are they? You'll just have to wait and see...

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All your favourite regulars – *Cheat Mode*, *Balrog*, *Type-ins*, *Reaction*, *Free for All* and much, much more...

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